Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

A31.3
R31Ae
cop.3

Restricted

REPORT ON THE

AGRICULTURAL EXPERIMENT STATIONS

1955

FARM

Agricultural Research Service
United States Department of Agriculture

ARS-23-2 **MARCH 1956**

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 20 cents

L)

REPORT ON THE AGRICULTURAL EXPERIMENT STATIONS, 1955

By E. C. Elting, Deputy Administrator for Experiment Stations,
Agricultural Research Service

A financial report on the activities of the agricultural experiment stations is required by law. In past years summary statements, giving brief highlights on significant findings, have been included with the financial report. In view of the wide coverage given these findings in station periodicals, regional reports, and annual reports of State experiment stations, summaries are being omitted this year. Only the general trend of research activities at the experiment stations, in the fiscal year 1955, is reviewed briefly. Although the 1st Session of the 84th Congress enacted Public Law 352, consolidating the Hatch Act of 1887 and supplementary laws relating to the appropriations of Federal funds for the support of agricultural experiment stations in the States, Alaska, Hawaii, and Puerto Rico, this Act did not become law until August 11, 1955, following the close of the fiscal year.

Inquiries regarding the operations and findings at the agricultural experiment stations in any State, or relating to specific fields of agricultural research in that State, should be addressed to the Director of the State Experiment Station, whose name and address will be found in the listing at the end of the report.

The State agricultural experiment stations, including some 500 substations and outlying experimental farms, are an important part of the Nation's agricultural research establishment. Although autonomous institutions, responsible only to their State governments, these stations, in most States, were created through Federal legislation. For the past 68 years the Federal Congress has appropriated funds that have been an incentive to the States to make appropriations and to get additional private funds so that necessary research can be done on problems pertaining to agricultural production, marketing, and rural living. In 1955 the Federal-grant payments to States were approximately one-fifth of the total funds available for State experiment station expenditures. There is cooperation and coordination, in planning needed research, between the research agencies of the Department of Agriculture and the directors and research leaders at the State experiment stations.

Today, United States farmers are producing 38 percent more food and fiber on the same amount of land used in the late 1930's. They are doing this with fewer workers. In 1955 one farm worker in this country produced enough food and fiber to take care of his own and the needs of 18 other persons. Much of this increased output is the result of putting science to work on farms, which makes farming more efficient and productive.

Under the increased funds made available by Congress in 1955, for Federal-grant payments to State experiment stations, greater emphasis has been placed on the solution of problems relating to conservation of land resources, farm income, and adequate production for future consumer demands. The following summarizes some of the developments.

SOILS, PLANT SCIENCES, AND CONSERVATION OF RESOURCES

The State experiment stations are expanding their studies in forage crops, pastures, and ranges as the foundation for a prosperous livestock economy. There are many excellent forages with high yields and nutritive value, but their use has been limited by poor cultural practices. Recent studies have been made to learn more about ecological relationships, germination requirements, and ways to increase stand vigor and growth. Temperature, humidity, soil moisture, and nutrient requirements are important factors in obtaining and maintaining stands. Band seeding and fertilizer placement, for example, are necessary in maintaining good grass-legume stands. The Missouri station found that alfalfa stands, in an area where the saturation of the soil was brought to acceptable levels in the surface foot, produced over 4-1/2 tons of hay per acre. In Montana, early growth of forage species is due largely to water absorption. Studies at the Texas station indicate that nitrogen fertilizers do not greatly influence the amount of seed produced, but temperature and humidity have a marked effect on the seed set.

The fact that grazing trials, caged and mower strip samples are not reliable in evaluating forage species and mixtures has been known for a long time. The indicator techniques now being developed by several stations will give more rapid and accurate evaluation.

The Colorado station found that the carrying capacity of mountain meadows and the resulting beef production are increased markedly through proper irrigation control, nitrogen fertilization, and good livestock management. In the same studies it was shown that large increases in nitrogen yielded high-protein hays that can largely replace cereal supplements.

Soil Science

Increased emphasis on irrigation, particularly on supplemental irrigation in humid areas, has required numerous studies on cropping systems and fertilization, for efficient production under this practice. Maintenance of favorable soil moisture levels, throughout each growing season, is expected to bring changes in rates and methods of application of fertilizer and in crop management systems necessary for maintenance of productive soil conditions.

One station reported this year that with irrigation and heavy fertilization, yields of snapbeans were increased from 1500 pounds to 4000 pounds per acre, and yields of onions from 250 fifty-pound bags to 750 per acre.

Several stations began research on the identification and characterization of clay minerals and the effect of type of clay mineral on chemical and physical properties of the soil. The findings should contribute to a better understanding of physical soil properties with respect to porosity, oxygen content, moisture relations, drainage characteristics, and chemical properties, particularly with regard to the extent of nutrient retention and release to growing plants.

In addition there has been an increase in research on physical properties of soils in relation to organic matter additions and to crop management practices. Despite higher fertilization rates, increased intensity of cultivation has reduced the quantity of organic matter added to the soil and has accelerated the decomposition rate of organic matter already present. Losses of organic matter, plus compaction resulting from implement travel, have tended to reduce soil porosity, limit air and water movement, impair drainage conditions, and otherwise contribute to less favorable conditions for crop growth.

Microbiological studies are under way at several stations concerning the course of organic matter decomposition, the nature and persistence of intermediate products, and the effect of such products on specific physical soil conditions.

Other equally promising studies concern the fertility requirements of various crops and soils; plant response to specific environmental conditions; persistence of insecticides, herbicides, and fungicides in the soil and effects on beneficial soil organisms; and genesis, classification, and description of soil types.

Field Crops Research

Agricultural experiment stations are reporting considerable progress in developing productive new varieties of cereals, root crops, fibers and oilseeds, sugar crops and tobacco, resistant to crop pests and environmental hazards, adapted to definite areas, suitable for mechanized production, and possessing superior storage and technological qualities. Advanced breeding methods employ male sterility to permit more effective production of hybrid strains, use of colchicine and irradiation to induce genetic changes, and other new techniques. Concurrent with the new varieties, and coping with changes in agricultural conditions, are investigations aiming at more effective and labor-saving cultural, tillage, irrigation, crop protection, and harvesting and curing practices to return higher yields of better quality products. Many of these activities are regional projects, on a cooperative basis, among several States and the Department.

Fundamental genetic and cytological studies have been started, or expanded, with cotton, flax, wheat, corn, and potatoes. An accomplishment definitely of economic value is the transfer of deciduous bracts and smooth leaf from wild species to Upland cotton--resulting in less foreign matter and higher quality in either machine--or hand-picked lint. Radiation and radiochemistry studies with oats, barley, and other small grains are making further advances in this area. Breeding principles are being applied to wheat, oats, barley, corn, cotton, flax, potatoes, and tobacco to produce high yielding, adapted, disease-resistant, better quality varieties.

Productive cultural methods are sought and fertilizer requirements determined for best yields and higher qualities of corn, small grains, cotton, soybeans, potatoes, and sugar beets. The water requirements of field crops, and effective irrigation practices for cotton, soybeans, corn, and potatoes are in another experimental group. Higher qualities of products are also major objectives, in harvesting, curing, and storing experiments, with peanuts, tobacco, cotton, and potatoes. There is also new research on the enzyme systems and the protein contents of corn, on curing, fermentation, and the chemical properties of tobacco, and on milling and baking methods for new and experimental wheats, all ultimately of value to producers, converters, and consumers.

Weed Control

Increased Federal-grant research funds available in the 1955 fiscal year made possible 14 new weed control projects of a basic nature.

A new principle of weed control--bud and shoot inhibition--is being tested with considerable success, particularly in the North Central States. A number of stations in the Northeast are conducting studies on the persistence and movement of herbicides in soil, and have added considerably to our knowledge of this important subject. Research concerned with the effect of chemicals on soil microorganisms indicates that 2,4-D, the most widely used herbicide at present, does not affect soil organisms at the levels recommended.

Screening of chemicals for herbicidal properties was accelerated, and this resulted in a continuous flow of new and improved chemicals that are superior to the older ones for specific weed problems. Advancement has also been made in methods of application. It is becoming more evident that such factors as temperature, rainfall, humidity, soil type, and soil moisture greatly influence the results.

Insect Investigations

The research on insects that damage forage crops, meadows, pastures, and ranges was expanded as a defense against losses from these pests on ranges and to reduce insect damage to all forage production. One station reported a 15 percent increase in yield on alfalfa when leafhoppers were controlled and, another, an increased yield of 23 percent in alfalfa seed as a result of insecticide treatment.

Research on the physiological action of insecticides in insects, to determine the changes in the insect made by the insecticides, was strengthened. Many insect and mite pests have become resistant to one or more of the newer pesticides that gave such phenomenal control when they were first used. The development of resistance continues to spread and threatens to destroy the usefulness of some of our most economical methods of controlling these pests. This research is aimed at determining the cause of resistance and methods of preventing and overcoming it so that the most economical means of pest control will continue to be effective.

The use of insecticides to control soil infesting insects has produced substantial increases in yields of corn and other crops, but the insecticides remained in the soil. Also, insecticides applied to crops usually reach the soil unless it is volatile or decomposes. Too large an accumulation of some insecticides in the soil may be harmful to plant growth and so reduce crop production. The research on accumulations of insecticides in soil has shown that an appreciable decrease of soil microorganisms occurred in plots treated with high concentrations of insecticides. This research will establish the safe limits of insecticide accumulations that will insure the continued productivity of the soil.

Plant Disease Research

The increased appropriations in 1955 enabled the States to initiate or expand approximately 80 projects in plant disease research. The strengthened investigations on plant parasitic nematodes (coop. USDA) have already shown that these organisms cause more injury to crop plants than was formerly suspected. Chemicals, fallowing the soil (especially during hot, dry periods), crop rotation, mulches that favor parasite development, and resistant crop varieties have shown various degrees of nematode control.

Stations in the North Central and Northeastern regions (coop. USDA) have pooled their efforts in studies to control oak wilt. Poisoning of oaks with an efficient weed killer in a 50-foot band around infected trees prevented spread of the disease. The oak wilt fungus was not able to survive the warm summer months in dry lumber. It was shown that the fungus can be spread by insects that feed in fresh wounds, and this may facilitate the development of more efficient control measures by eliminating the insects during the active growing season when infections take place.

Research in viruses of small grains, grasses, legumes, vegetables, citrus and stone fruits was expanded. The chemical and physical characteristics of viruses, as well as host range and efficient methods of indexing to separate and identify these entities, are now receiving considerable emphasis. Investigations have been started to find chemical inhibitors that will prevent the multiplication and spread of viruses within the plant. A repository for maintaining virus-free deciduous tree fruit stocks has been established in a dry, isolated area of the Northwest which will furnish uniform, disease-free material for all interested researchers and for foundation stock.

Bacterial diseases that formerly were difficult to control and that limited the production of certain fruits, such as pear, can now be effectively prevented with antibiotics, according to reports from many of the stations. On the other hand, strains of the blight bacteria that resisted as much as five times the concentration of the antibiotic as strains collected under natural conditions were developed experimentally. A changed or mutant form of the apple scab fungus was found that could tolerate 5000 times as much antibiotic as the unchanged form.

Plant Physiology

Twenty-four new projects were initiated in 1955 in the field of plant physiology. A third of the new ones dealt with studies of enzymes and metabolism, seven with mineral nutrition, and the remainder with the effects of light and growth regulators on plants.

The metabolism studies indicated that indoleacetic acid speeds up production of pectic substances in the cell wall of the plants, and that boron deficiency adversely influences cell wall growth. Research in plant nutrition has developed improved methods for foliar analyses and diagnosis of nutritional deficiency and better techniques for foliar application of minor elements. Deficiences of magnesium, zinc and boron in celery were corrected by this procedure. Chlorosis in many species was corrected by the use of chelating agents, a promising new approach to plant nutrition.

Vegetable Crops

Vegetable crops research has been expanded in areas seeking new varieties suitable to mechanical harvesting and commercial processing. For instance, growers and processors have requested a white-seeded bush bean, with pods the quality of the Western-grown Blue Lake bean, capable of mechanical harvesting. Varieties of edible Southern peas better adapted for Southern growing conditions and with improved processing characteristics are needed. A higher degree of resistance to the late blight disease must be added to our tomato varieties. The asparagus yields in Eastern growing areas have not been materially increased in the last 20 years. Basic physiologic studies are needed to suggest new cultural practices for increasing the yield, quality, and productive life of the fields. These are some of the areas of vegetable research started or expanded this past year by the State Experiment Stations.

Fruit Growing

New or expanded lines of research in fruit production include studies of the nutritional requirements of the fruit tree as revealed by analysis of the leaves, effect of various insecticides and fungicides on the flavor and other quality factors in the harvested fruit, role of color mutants and other variants in the improvement of fruit species. Development of new fruits, for regions of adverse climate, by crossing native with introduced varieties is also under way. Stations are testing apple rootstocks to develop smaller and earlier producing trees that can be more economically sprayed and harvested. Chemical thinning of peach fruits, selection of virus-free plants for the development of virus-free orchards and small fruit plantings, and the role of the so-called minor elements in the nutrition of fruits and nuts are among the expanded fields of study.

Farm Forestry

New research in farm forestry reported in 1955 included studies of the effect of day length and temperature on the beginning and cessation of annual growth in the hemlock; the soil and other ecological requirements of various coniferous species; physiological differences in southern pine seedlings of various parental origins. Experiments are under way seeking utilization of small and inferior trees as wood chips for soil improvement and other purposes. Expanded fields of research, all planned and designed to aid farm owners improve their woodlots and forest holdings, included the selection of superior strains of trees, planning and management of Christmas tree plantations, improved marketing of forest products, and effect of forest cover on soil and water resources. In some States further studies were undertaken on treating the wood and posts of native species with pentachlorphenol and other preservatives. In some States, also, research on better methods of farm forest management seeking longtime production and income for the owner are under way.

Ornamental Plants

Horticultural research seeking new varieties of horticultural plants has increased to aid nurseries in growing and supplying the new types of shrub, flower and ornamental bush and tree that fit into the setting of modern farm and suburban homes. There has been a trend toward homes with lower roof lines, floors closer to the ground, and windows only 2 or 3 feet above the ground line. Dwarf shrubs needed for landscaping these buildings are scarce because of a lack of types, difficulty of propagation, lack of adequate fertilization knowledge, and the time and expense of growing dwarf plants to salable size. One approach to this problem, the exposure of available shrubs to irradiation to induce dwarf mutants, was made in experiments started in 1955. Iron chlorosis is a problem with many ornamental plants grown on alkaline soils, and lack of winter hardiness of ornamentals is still a major problem in Northern States. New plant introductions need to be screened for possible use under these conditions. Increased transportation costs necessitate the development of a lightweight, moisture retentive wrapping material for nursery plants. New rapid methods of propagation utilizing new chemicals and procedures which will lower production costs need to be developed. Four States have started research to investigate these problems.

ANIMAL SCIENCES

Beef Cattle, Sheep and Swine Breeding

Research in beef cattle breeding, involving cooperation between 40 State experiment stations and the Department, has been strengthened and expanded at several stations. This broad effort is contributing materially to our knowledge of genetic and environmental factors that affect performance and methods for using this information in improving the effectiveness of selection. Results of performance and progeny tests have shown that rate and efficiency of gain can be improved substantially by selection of breeding animals on the basis of performance records. Hereditary dwarfism has become an important problem in beef herds and must be eliminated if maximum efficiency in beef production is to be obtained. Progress was made in determining the inheritance of different types of dwarfism, physiological effects of the dwarf gene, and the evaluation of methods for the identifications of breeding animals that carry the dwarf gene in a recessive form.

Sheep breeding research was initiated to develop an improved strain of open-faced Rambouillet sheep for range production, and to evaluate inbreeding and line crossing for increasing productivity of certain mutton breeds. The erratic breeding behavior of sheep when bred for early lamb production is an important problem in areas of high summer temperatures. Hormonal control of reproductive processes and the effect of environmental temperatures on fertility of rams and ewes are being studied in an effort to develop practical procedures for improving breeding performance.

New research in swine breeding has been concerned with the evaluation of breeding methods and the development of procedures for testing production performance and identification of superior strains.

Ruminant Nutrition

Other research was launched on the possibility of increasing the use and value of low-quality forage for ruminants and also increasing the productiveness of high-quality roughage. Much of this research is being conducted with dairy cattle but applies to all ruminants. Studies in progress are aiding the nutritionist to formulate practical rations for ruminants that provide optimum conditions for rumen microorganisms, thus increasing the energy available to the animal from forages. Certain factors present in good quality hay that enhance the nutritive value of fiber in forages have been identified. Ohio scientists have found, in studies with an artificial rumen, that valeric acid stimulates the fiber breakdown of roughage by rumen bacteria nearly 300 percent. Other scientists are attempting to discover the maximum amounts of nonprotein-nitrogenous substances that can be substituted for high-quality protein and their effect on the digestibility of the ration. Several new nitrogen compounds, such as ammoniated molasses, that are satisfactory as partial protein replacements for ruminants are being tested in practical low cost rations. These are especially useful in feeding with low-quality roughages that are low in protein.

Research on the use and mechanism of action of antibiotics fed to various classes of livestock is increasing. Animal researchers are attempting to find out if antibiotics interfere with rumen activity, digestibility, and efficiency of feed utilization.

The results of studies with stilbestrol fed to fattening beef animals have been put to wide use in the feedlot. Research at the Iowa station resulted in a practical method for utilizing stilbestrol in fattening rations of beef cattle. An estimated 2 1/2 million beef cattle were fattened on feeds containing stilbestrol during early 1955, with large savings on feed costs. Considerable research is under way to determine the mechanism of action of stilbestrol and its effects on carcass composition.

Dairy Husbandry

Major advancements in the use of frozen semen have been made with dairy cattle. At present semen frozen to 79° and stored for one year has proved equal to fresh semen for insemination purposes. The use of frozen semen makes it possible to double the number of potential offspring which can be obtained from a single sire. In other words, the inferior half of the sires now used in artificial breeding associations could be discarded if all associations were to use frozen semen.

Radioactive iodine has been used to measure certain metabolic characteristics which may enable scientists to determine potential feed efficiency and capacity for milk production of dairy animals at an early age.

"Tagged" feeds (those containing a radioactive element for identification purposes only) are also being used to determine the nutrients most essential for efficient milk production.

Poultry Husbandry

Increased Federal-grant moneys for the fiscal year 1955 have encouraged a number of experiment stations to devote intensive study to the mode of action of antibiotics in the chicken and turkey diet. Other new studies launched, deal with the use of artificial light for increasing weight-grain and feed efficiency, and the glandular mechanism or physiological behavior that affects the economic characters of poultry. Geneticists are concentrating on the problem of infertility, which renders worthless 15-30% of all chicken eggs set in the incubator, and an even larger percentage of turkey eggs. Fertility is an inherited factor, and is being improved by intra-flock matings, selection, and artificial insemination. At one station fertility in some strains is now above 95%.

Regional research carried on cooperatively by many experiment stations (coop. USDA) recognizes that purebred stock will continue to provide the essential foundations for better crossbreds and hybrids in poultry breeding. Hybridization, however, presents decided advantages such as the reduction of the number of economic characteristics to be incorporated for a high degree of excellence in a single line of birds, and the production of superior combinations in large numbers with assurance of comparable performance.

Advancement in avian nutrition includes evidence that the ratio of productive energy to crude protein, in a ration, influences the caloric intake, feed efficiency, growth rate, percent of water and fat in carcass, and feather condition; more information on unidentified growth factors; and the importance of Vitamin E and amino acids. Management research is developing more means of saving time and labor on poultry farms, increasing the hatchability of eggs through refinements of incubation, and improving production through better techniques.

Veterinary Research

Although all losses from diseases and animal parasites can never be eliminated, livestock producers, veterinarians and technical personnel appreciate that losses from this source can be materially reduced through research and education. Research can develop sound control measures and widespread educational programs can bring about control, very largely through voluntary means.

Some of the important diseases that have appeared or have been recognized in recent years are mucosal disease, virus diarrhea, rhinotracheitis, white muscle disease, and fescue foot of cattle, atrophic rhinitis of swine, chronic respiratory disease and hemorrhagic disease of poultry, and bluetongue of sheep. Although research was initiated in 1955 on several of these, solution can be expected to come slowly and only after much experimentation.

Both new and expanded work with increased financial support were undertaken in 1955 in the field of livestock diseases and parasites. New information on the infestation by cattle nematodes on different types of forage and the performance of cattle under varying degrees of parasitism was obtained. Data were collected that indicate certain coccidiacontrol agents contribute to hemorrhagic disease. A diagnostic procedure was developed for bluetongue of sheep based on the effect of the virus on individual cells of certain tissues.

AGRICULTURAL ENGINEERING

Farm Machinery

Research in farm machinery, having as its aim the development of machines and equipment for fields not yet completely or satisfactorily mechanized, was expanded. The testing of commercial models introduced by industry, on principles growing out of previous development research at the stations, showed a steady improvement in efficiency in experimental farm trials. Emphasis was heavy on harvesting equipment, flame and chemical weed control equipment, and conveying equipment in the effort to reduce high labor costs. Ventilating the drying equipment to improve quality and decrease storage losses of forage and grain crops was also an important part of the year's activity in machinery design.

Irrigation

Irrigation investigations were expanded as the race to provide the highest crop yields at the lowest unit cost continued. Drainage problems, particularly the techniques of drainage investigations, were studied in a number of states where inadequate drainage or accumulations of injurious salts are causing severe hardship to farmers by reducing yields on formerly productive lands. In one state tests were conducted on land which had been forced out of production by an accumulation of salts resulting from high water table and inadequate drainage. This land was reclaimed by proper ground water control and yielded 90 bushels per acre of corn, 20 tons per acre of beets, and 50 bushels per acre of barley.

Farm Buildings

The improvement of farm building materials and structures has also been expanded as additional research is underway on development of new types of building blocks, the use of short timbers in truss and beam construction, and the development of improved building designs for farm buildings.

FOOD SCIENCE AND TECHNOLOGY

Quality Evaluation, Processing and Product Developmental Research, Utilization. Basic contributions to food quality evaluations have been obtained in research on the mechanism and

inhibition of fat oxidation in foods stored at low temperature. For example, research on the changes effected in peanut oil on roasting implicates the unsaturated fatty acids and suggests another objective approach to flavor problems in peanuts and, perhaps, fatty foods in general.

Fundamental processing studies promise new advances in canned food sterilization. Research on food spoilage organisms, specifically their thermal resistance, destruction and order of death, will be translated into specifications for food processing. Other advances in processing technology include investigations pertaining to the use of ultrasonic waves in the sterilization of food products; the effect of ionizing radiation on microorganisms, insects and on the food products; and, development of a centrifuge type extractor for recovery of a new fruit juice product from the Passion fruit (Passiflora edulis) of Hawaii.

To facilitate increased utilization, a storage method has been devised that frees dried egg whites of infection by Salmonella without seriously imparing the functional properties of the albumen. Puerto Rico station scientists have successfully adapted a method for recovery of natural Vitamin C by crystallization from Acerola (West Indian cherry). Commercial use of this procedure is providing a new use for the agricultural resources of the Island and, thereby, contributing to the economic and nutritive welfare of its people. Other industrial microbiological research on the utilization of molasses and fungal enzyme action is in progress.

Dairy Technology

Attempts are being made to sterilize milk without heating, by irradiation. Sonic vibrations have been used to reduce the curd tension of milk and allow cheese starters to produce a fully ripened cheese in a few weeks instead of the usual months. Chemical tests to supplant organoleptic tests (taste panels) are proving practical in some instances. Other chemical tests for minute amounts of harmful insecticide residues are being perfected. Carbonyl compounds resulting from oxidation of butter oil have recently been isolated and identified. More delicate and practical tests for milk fat substitutes have been developed. And the amino acids responsible for the characteristic flavor in certain cheeses have been identified by paper chromatography. Tests for traces of illegal additives to milk, such as quaternary ammonium compounds and hypochlorites, have been developed. Dairy wastes are being efficiently disposed of through fermentation and aeration.

HOME ECONOMICS RESEARCH

Human Nutrition

Controlled metabolic survey type studies have continued to provide a scientific basis for estimating human dietary requirements in growth, reproduction, and aging. The relationships between nutrient intake, the level of certain blood components, and the incidence of certain physical lesions have been defined further with (1) studies of subjects consuming known amounts of foods and food nutrients and (2) continuing long-term researches with both adults and children receiving, in addition to regularly self-chosen diets, single or multiple nutrient and/or food supplements. The importance of considering both the source and ratio of food nutrients in estimating dietary needs has been emphasized by studies of biological availability and interrelationships of nutrients.

Rural Housing

Housing research has continued with attention to the many aspects of rural housing, including space standards and functional designs and arrangements for home storage and activities; construction methods and utilization of materials; farm home utilities; farm home safety; influence of geography and environmental factors on housing design; and housing needs in relation to socio-economic status, stage in the family life cycle, and age of occupants. The many findings, individually or composited, are being interpreted in the form of recommendations, graphic standard designs, and modular plans for use of families, architects, and builders in remodeling or building anew.

Increased Federal-grant funds for 1955 were utilized mainly for new or expanded studies that strengthened the regional research in nutritional status and housing; for implementing recently initiated regional research on garment selection, use and serviceability, and related consumer satisfaction; and for research on utilization, quality, and nutritive value of foods.

MARKETING, AGRICULTURAL ECONOMICS, AND RURAL SOCIOLOGY

Marketing Research

Consistent with the provision that not less than 20 percent of any funds granted under the authorization of Section 9 of the 1946 amendment of the Bankhead-Jones Act shall be used for marketing research, the stations have been placing major emphasis on this field.

Considerable progress has been made in determining the relationship between marketing efficiency and certain causal factors such as size and location of marketing firms, handling methods, and channels of distribution. Strides have been made also in the measurement of consumer preference, in developing improved methods of raising and maintaining the marketable quality of products. Joint economic-engineering studies have pointed the way to significant savings which can be effected by marketing agencies in processing, handling, and transporting farm products. Many of such savings can be made without major changes in capital investment or in business ownership and organization.

However, marketing problems arising as a result of increased competition from products of non-agricultural origin, consumer demand for more marketing services, higher wage costs, changes in tastes and preferences, and other characteristics of a growing and progressive economy are continuing and recurring. To meet this challenge, the stations are giving increased attention to areas of research that have been relatively neglected. Some of these are changes in marketing organization and structure to transmit more effectively consumer preferences to producers; institutional and other barriers which hinder the rapid and widespread adoption of marketing improvements by farmers and marketing agencies; economic aspects of grades and standards; and factors affecting the possibilities for minimizing short-time fluctuations in prices received by farmers. Among the most promising of a number of regional marketing projects are those dealing with past, present, and alternative Government programs.

Farm Economics

Experiment stations are seeking an increased flow of up-to-date information on cost reduction in the overall farm operation. New farm technologies continue to develop rapidly. All farmers face the problem of determining how these new developments may be applied and the extent to which they will pay on their farms. The farmer strives to select the best combination of crop and livestock enterprises and the best practices to fit his individual situation. This combination must fit all of the scarce resources; not just one resource, such as land or a labor plan. Recent station research has shown that the plan which gives the greatest profit per acre may not be the one which will give the greatest profit to the farm as a whole, because part of the capital and labor might return more if used for a larger livestock enterprise or a new practice. New methods of determining the most profitable farm plan have been developed and progress is being made in developing highest profit combinations under given conditions.

Increases in appropriations during the past two years have permitted the initiation of research designed to find ways for reducing cost and improving efficiency in livestock production studies, and analyzing different forage production, harvesting, curing, and utilization practices. Farmers need answers on most profitable rates of feeding and fertilizer application under different feed, fertilizer, and product prices. Other problems include feasibility of improving existing land versus buying or renting additional land, the adapting of barns, silos, machinery, and other equipment in the interest of higher labor efficiency, and conditions under which irrigation and drainage may be economically feasible. Broad problems that are of immediate concern not only to individual farmers but also to agriculture and the country in general include uses of diverted acres which will promote higher farm incomes and proper conservation and methods of raising levels of living for low-income farmers.

Rural Life Studies

During the past year, State experiment stations made a special effort to focus rural life research on the most critical problems brought on by the very rapid change taking place in agriculture and the increasing complexity of living in today's changing community. Research was concentrated on and made substantial progress toward: (1) Detecting barriers to and developing educational techniques for the more effective adoption of new and improved farm and home practices; (2) improving means of dissemination and transfer of farm information; (3) providing tools

for improving the effectiveness of rural adult education programs in guiding rural communities and families to solve their own problems and to develop and maximize all their physical, social and economic resources; (4) measuring and predicting the amount of, and evaluating the impact of population changes and migration upon the changes in, and efficiency of agricultural production, utilization of agricultural manpower, land use, tax base, rural and urban planning, adult education programs, community, institutional, commercial, industrial and governmental services; and (5) measuring the relationship of farm family levels of living, including availability and use of health facilities and services, to various agricultural, social, and population factors. While considerable progress has been made in the above fields of research, the stations are realizing the need for and are moving ahead to emphasize and to apply such research to geographic and problem areas that have been relatively neglected.

STATISTICS--PERSONNEL, PUBLICATIONS, INCOME, AND EXPENDITURES

Personnel and Publications

The research personnel of the experiment stations in 1955 included 3,259 staff members devoting full time to station research and 4,633 who divided time between research and teaching or extension work. The total in both categories was 7,892.

Printed publications of the experiment stations in 1955 included 865 bulletins, circulars, and reports; 6,210 articles in scientific journals; and 717 miscellaneous publications. In addition, 553 popular and 1,116 technical reports, bulletins, and circulars were processed by the stations.

Data by individual States relating to personnel and publications are shown in tables 1 and 2.

Income and Expenditures

Appropriations under the authorizations of the Hatch, Adams, and Purnell Acts for use by the experiment stations in 1955 totaled $4,590,000, each State, Hawaii, Alaska, and Puerto Rico receiving $90,000. A total of $2,863,708 was appropriated under section 5 of the Bankhead-Jones Act of June 29, 1935, with allotments to the individual States, Hawaii, Alaska, and Puerto Rico as shown in table 3. These allotments are made primarily on the basis of rural population adjusted in accordance with the provisions of the Department of Agriculture Organic Act of 1944. The total amount of Federal-grant funds appropriated to the State Experiment Stations Division under the Hatch, Adams, and Purnell Acts, and title I, sec. 5 of the Bankhead-Jones Act, was $7,453,708.

Under title I, sec. 9 of the Bankhead-Jones Act $11,500,000 was appropriated. Of this total $345,000, authorized by section 9 (c) of the act, was available to the State Experiment Stations Division for administration. Of the remainder $8,280,000 was allotted to the States, Hawaii, Alaska, and Puerto Rico, under the formulas described in sections 9 (b) (1) and (2); $2,875,000 was available for allotment to the States for cooperative regional research projects authorized by section 9 (b) (3) and for travel by the Committee of Nine established in accordance with this section. The amounts allotted under sections 9 (b) (1), (2), and (3) are shown in table 3.

In addition to the Federal-grant funds enumerated above, the Division received funds from the Agricultural Marketing Act, section 204 (b) for allotment to the State agricultural experiment stations for marketing research. Allotments totaling $500,000 were made to the stations during the fiscal year 1955 (table 3).

Non-Federal income of the stations appears in table 4.

Expenditures of Federal-grant funds are shown under object classes by individual experiment stations in tables 5, 6, 7, 8, 9, and 10; expenditures of non-Federal funds are indicated in table 11. The 1955 expenditures of non-Federal funds which include State appropriations, research grants, and income from other sources totaled $72,157,504.67, as compared with $67,205,204.62 in 1954. The 1955 non-Federal fund expenditures by all of the stations approximated $3.90 for each $1 of Federal grants. Summaries of expenditures appear in tables 12 and 13.

Expenditures and allotments of funds from the Agricultural Marketing Act are shown in table 14.

TABLE 1.--Organization and personnel of the experiment stations for the year ended June 30, 1955

Station	Date of legislative assent to Hatch Act	Date of organization under Hatch Act	Personnel				
			Full-time research	Research and teaching	Research and extension	Research, teaching, and extension	Total research workers
			Number	*Number*	*Number*	*Number*	*Number*
Alabama	Feb. 27, 1889	Apr. 1, 1888	68	63	.....	4	135
Alaska	May 2, 1929	May 1, 1931	12	.....	12	.....	24
Arizona	Mar. 19, 1889	July 1, 1889	57	45	.....	.....	102
Arkansas	Mar. 7, 1889	April 2, 1888	43	61	1	1	106
California	Mar. 12, 1889	Mar. 13, 1888	181	374	.....	.....	555
Colorado	Mar. 25, 1889	Feb. 20, 1888	25	91	.....	5	121
Connecticut:							
State	May 18, 1887	May 18, 1887	89	.....	.....	.....	89
Storrs	do	Apr. 1, 1888	36	36	2	11	85
Delaware	Apr. 14, 1887	Feb. 21, 1888	17	20	3	7	47
Florida	June 7, 1887	Mar. 16, 1888	182	43	5	4	234
Georgia	Dec. 24, 1888	Feb. 18, 1888	98	56	.....	4	158
Hawaii	Mar. 31, 1911	July 1, 1929	41	19	1	1	62
Idaho	Jan. 23, 1891	Feb. 26, 1892	34	43	2	1	80
Illinois	May 11, 1887	Mar. 21, 1888	100	132	13	6	251
Indiana	Jan. 19, 1889	July 1, 1887	119	112	21	19	271
Iowa	Mar. 1, 1888	Feb. 17, 1888	78	124	20	19	241
Kansas	Mar. 3, 1887	Feb. 8, 1888	38	188	.....	.....	226
Kentucky	Feb. 20, 1888	Apr. 29, 1888	114	50	5	10	179
Louisiana	July 12, 1888	Apr. 5, 1887	128	62	1	.....	191
Maine	Mar. 16, 1887	Feb. 16, 1886	35	39	.....	1	75
Maryland	Mar. 6, 1888	Mar. 9, 1888	20	39	10	29	98
Massachusetts	Apr. 20, 1887	Mar. 2, 1886	51	37	5	11	104
Michigan	Apr. 12, 1889	Feb. 26, 1888	78	149	14	8	249
Minnesota	Feb. 4, 1889	Jan. 26, 1888	41	183	8	4	236
Mississippi	Jan. 31, 1888	Spring, 1888	67	56	.....	3	126
Missouri	June 11, 1889	Jan. 31, 1888	7	136	5	5	153
Montana	Feb. 16, 1893	July 1, 1893	35	76	3	4	118
Nebraska	Mar. 31, 1887	June 14, 1887	63	83	1	1	148
Nevada	Feb. 8, 1889	Dec., 1887	16	11	.....	5	32
New Hampshire	Aug. 4, 1887	Feb. 22, 1888	8	46	6	5	65
New Jersey	Mar. 16, 1887	Mar. 5, 1888	80	85	2	2	169
New Mexico	Feb. 28, 1889	Nov. 14, 1889	23	31	1	4	59
New York:							
Cornell	Mar. 30, 1887	Apr. 30, 1888	36	155	32	46	269
State	(1)	.....	72	.....	.....	.....	72
North Carolina	Mar. 7, 1887	Dec. 5, 1889	101	110	.....	4	215
North Dakota	Mar. 8, 1890	Oct. 15, 1890	37	44	1	.....	82
Ohio	Mar. 16, 1887	Apr. 2, 1888	65	116	3	4	188
Oklahoma	Oct. 27, 1890	Aug. 14, 1891	55	91	9	7	162
Oregon	Feb. 25, 1889	July 2, 1888	98	109	7	4	218
Pennsylvania	June 3, 1887	June 30, 1887	1	242	1	5	249
Puerto Rico	Aug. 16, 1933	Nov. 14, 1935	112	.....	.....	.....	112
Rhode Island	Mar. 31, 1887	Nov. 3, 1886	21	29	.....	9	59
South Carolina	Dec. 22, 1887	Jan., 1886	67	25	2	3	97
South Dakota	Mar. 11, 1887	Nov. 17, 1887	29	64	.....	6	99
Tennessee	Mar. 29, 1887	July 24, 1887	91	52	.....	15	158
Texas	Apr. 2, 1887	Jan. 25, 1888	176	74	11	18	279
Utah	Mar. 8, 1888	Nov. 6, 1889	23	66	.....	3	92
Vermont	Nov., 1888	Feb. 28, 1888	9	27	6	14	56
Virginia	Feb. 29, 1888	June 13, 1888	97	51	11	8	167
Washington	Mar. 9, 1891	May 1, 1891	75	80	2	2	159
West Virginia	Feb. 22, 1889	June 11, 1888	20	65	3	1	89
Wisconsin	(2)	July 1, 1887	63	114	6	20	203
Wyoming	Jan. 10, 1891	Mar. 27, 1891	27	46	.....	5	78
Total	.....	.....	3,259	4,050	235	348	7,892

[1] First made eligible to receive part of the State allotment of Federal funds by legislative act approved May 12, 1894.
[2] Session of 1887

TABLE 2.--Publications issued by the agricultural experiment stations during the fiscal year ended June 30, 1955

Station	Printed publications																Processed publications			
	Reports, bulletins, and circulars				Articles in journals				Periodicals				Pamphlets, leaflets, etc.				Reports, bulletins, circulars, etc.			
	Pop.	Tech.	Pages	Copies	Pop.	Tech.	Pages	Copies reprinted	Pop.	Tech.	Pages	Copies	Pop.	Tech.	Pages	Copies	Pop.	Tech.	Pages	Copies
Alabama	.....	9	396	44,200	.....	103	412	13,100	4	.....	32	32,000	5	.....	18	30,000	11	63	504	42,050
Alaska	8	14	132	14,900	5	4	16	.....	.....	.....	.....	.....	.....	9	21	3,100	14	5	129	3,025
Arizona	10	.....	366	24,000	.....	13	71	3,300	4	.....	48	40,000	.....	.....	.....	.....	2	3	147	4,800
Arkansas	.....	14	592	45,500	.....	19	79	.....	.....	4	36	25,000	.....	7	140	19,000	.....	8	83	10,250
California	13	7	782	306,000	372	1,000	15,516	.....	23	.....	704	422,000	17	.....	160	263,500	.....	12	558	4,800
Colorado	7	3	413	35,050	.....	11	117	2,200	2	.....	156	160,800	2	.....	13	10,000	32	.....	644	24,900
Connecticut:																				
State	.....	16	632	77,300	34	58	362	.....	2	.....	16	11,000	.....	.....	.....	.....	.....	5	111	1,500
Storrs	.....	7	214	13,700	.....	60	436	17,500	3	.....	36	24,000	.....	.....	.....	.....	.....	4	26	7,750
Delaware	.....	7	.....	17,000	.....	37	149	.....	.....	.....	.....	.....	.....	25	25	15,000	1	27	71	1,550
Florida	35	6	1,236	327,500	180	153	1,154	.....	.....	.....	.....	.....	.....	.....	.....	.....	68	.....	501	20,735
Georgia	16	1	592	58,100	20	55	270	.....	.....	3	30	37,000	.....	9	50	9,400	21	6	356	56,200
Hawaii	4	7	330	22,500	.....	23	167	5,400	4	.....	32	10,000	.....	.....	.....	.....	4	.....	30	5,000
Idaho	14	4	334	54,000	.....	23	(1)	.....	2	.....	16	30,000	.....	.....	.....	.....	.....	.....	.....	.....
Illinois	1	15	672	75,700	.....	211	1,371	.....	.....	3	56	30,000	.....	.....	.....	.....	.....	28	321	12,621
Indiana	24	.....	804	118,000	.....	89	561	.....	.....	.....	.....	.....	5	.....	96	11,000	15	16	198	83,925
Iowa	7	25	1,018	170,125	.....	191	1,528	57,100	12	.....	276	347,000	61	1	266	61,600	.....	.....	.....	.....
Kansas	23	3	905	239,800	17	108	588	18,950	97	2	293	570,114	27	10	226	61,531	92	6	600	80,995
Kentucky	1	17	582	59,800	28	12	128	.....	.....	.....	.....	.....	9	7	472	49,900	17	9	277	24,785
Louisiana	1	8	538	58,500	.....	109	338	.....	.....	4	32	16,000	.....	.....	.....	.....	6	104	1,808	50,550
Maine	.....	13	337	32,500	35	47	(1)	.....	4	.....	96	27,500	.....	4	138	2,950	1	10	256	6,550
Maryland	6	3	319	18,500	4	29	180	16,500	.....	.....	.....	.....	.....	.....	.....	.....	8	21	473	18,000
Massachusetts	.....	8	317	24,200	.....	70	267	10,750	2	12	80	17,100	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	15	11	990	187,000	.....	76	363	.....	4	.....	606	9,600	.....	.....	.....	.....	.....	.....	.....	.....
Minnesota	5	4	236	49,000	.....	277	1,222	.....	3	.....	56	49,700	3	.....	64	25,000	5	.....	23	(1)
Mississippi	14	2	545	27,000	.....	105	(1)	.....	12	.....	96	498,000	17	.....	34	18,000	.....	4	167	4,600
Misaouri	28	34	1,728	174,815	92	.....	(1)	.....	12	.....	48	330,000	52	.....	52	104,000	.....	.....	.....	.....
Montana	13	3	516	56,300	.....	22	135	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	612	3,000
Nebraska	10	4	483	81,000	.....	54	(1)	.....	4	.....	64	60,000	50	1	182	112,500	31	.....	314	38,000
Nevada	2	.....	26	10,000	2	2	19	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire	4	2	145	12,500	.....	10	73	2,500	2	.....	28	4,500	.....	.....	.....	.....	4	.....	8	900
New Jersey	11	4	204	80,000	.....	81	487	.....	6	12	1,096	99,000	10	.....	204	13,110	14	.....	77	68,250
New Mexico	11	.....	330	36,750	3	.....	15	625	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	125	18,550
New York:																				
Cornell	.....	15	800	62,950	.....	691	3,131	.....	4	.....	64	111,000	.....	.....	.....	.....	.....	318	5,549	(1)
State	.....	3	141	10,200	.....	43	(1)	.....	4	.....	64	111,500	4	.....	7	2,800	15	79	261	15,405
North Carolina	7	8	665	86,900	.....	89	445	.....	4	.....	32	12,000	.....	.....	.....	.....	28	35	1,045	54,963
North Dakota	7	.....	354	38,000	.....	61	275	.....	6	.....	244	52,000	1	.....	2	8,000	13	53	190	19,265
Ohio	1	20	890	95,000	.....	55	220	.....	6	.....	96	147,500	36	2	167	85,500	.....	81	942	75,386
Oklahoma	30	3	623	137,000	.....	33	171	(1)	6	.....	101	18,000	10	2	181	39,250	7	.....	101	5,700
Oregon	6	5	201	56,000	.....	66	(1)	(1)	4	.....	64	24,850	4	.....	8	2,750	11	7	230	18,765
Pennsylvania	14	21	757	145,500	11	74	383	.....	4	.....	64	80,000	.....	.....	.....	.....	1	5	106	2,950
Puerto Rico	.....	10	501	30,000	.....	9	37	.....	.....	4	203	12,000	8	.....	207	9,000	.....	.....	.....	.....
Rhode Island	4	11	450	24,800	.....	9	38	2,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina	.....	18	654	101,575	76	21	(1)	.....	4	.....	32	13,000	.....	.....	.....	.....	.....	56	56	20,900
South Dakota	21	3	842	117,700	.....	12	60	.....	4	.....	116	24,000	3	.....	48	13,000	16	.....	841	2,498
Tennessee	15	2	568	96,500	90	61	755	14	4	.....	48	12,000	.....	.....	.....	.....	16	1	126	27,500
Texas	8	16	548	97,000	.....	213	611	.....	2	.....	32	17,000	4	.....	16	25,000	15	106	1,132	340,500
Utah	9	3	476	34,500	.....	23	109	.....	4	.....	92	26,000	1	.....	4	20,000	6	.....	92	2,400
Vermont	3	5	150	16,186	.....	7	26	.....	1	.....	16	5,000	.....	.....	.....	.....	.....	.....	.....	.....
Virginia	7	3	338	43,000	40	157	828	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	26	556	12,814
Washington	.....	18	588	35,800	.....	124	965	23,175	.....	.....	.....	.....	.....	.....	.....	.....	14	11	431	29,700
West Virginia	11	3	240	59,500	.....	7	37	900	4	.....	52	26,000	.....	.....	.....	.....	4	.....	28	15,500
Wisconsin	6	1	328	115,000	.....	378	(1)	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	9	13,000
Wyoming	13	1	206	40,000	.....	16	58	(1)	4	.....	72	35,830	.....	.....	.....	.....	12	.....	74	6,850
Total	445	420	27,034	3,994,351	1,009	5,201	34,173	175,214	267	44	5,325	3,577,994	329	77	2,801	1,014,891	553	1,116	20,188	1,257,382

[1] Total unknown.

TABLE 3.--Federal funds available to the experiment stations for the year ended June 30, 1955

Station	Federal-grant funds[1]					Contractual Federal funds Agricultural Marketing Act Sec. 204(b)			Total Federal funds available
	Hatch, Adams, and Purnell[2]	Bankhead-Jones, title I			Total	Carryover from 1954	1955 allotment	Total	
		Sec. 5	Secs. 9(b)1 and 9(b)2	Sec. 9(b)3					
Alabama	$90,000	$88,305.89	$255,186.33	$60,800.00	$494,292.22	.....	$6,100.00	$6,100.00	$500,392.22
Alaska	90,000	4,736.40	50,364.65	5,000.00	150,101.05	.....	4,200.00	4,200.00	154,301.05
Arizona	90,000	16,740.68	72,577.17	53,050.00	232,367.85	.....	4,000.00	4,000.00	236,367.85
Arkansas	90,000	66,187.20	211,783.02	46,235.00	414,205.22	.....	.....	.....	414,205.22
California	90,000	102,716.44	230,087.89	68,450.00	491,254.33	.....	10,300.00	10,300.00	501,554.33
Colorado	90,000	25,460.16	95,920.53	79,600.00	290,980.69	.....	5,000.00	5,000.00	295,980.69
Connecticut:									
State	45,000	11,257.19	38,778.22	3,000.00	98,035.41	.....	.....	.....	98,035.41
Storrs	45,000	11,257.19	38,778.22	46,370.00	141,405.41	$1,630.56	10,500.00	12,130.56	153,535.97
Delaware	90,000	5,970.02	55,714.48	11,400.00	163,084.50	.....	.....	.....	163,084.50
Florida	90,000	48,046.76	125,387.84	27,700.00	291,134.60	1,340.00	12,985.00	14,325.00	305,459.60
Georgia	90,000	98,402.95	264,092.75	97,886.00	550,381.70	222.71	20,450.00	20,672.71	571,054.41
Hawaii	90,000	10,463.17	66,939.57	13,000.00	180,402.74	.....	.....	.....	180,402.74
Idaho	90,000	16,866.19	83,530.75	50,000.00	240,396.94	.....	5,000.00	5,000.00	245,396.94
Illinois	90,000	99,478.95	243,980.90	71,516.00	504,975.85	789.10	12,000.00	12,789.10	517,764.95
Indiana	90,000	79,141.32	211,396.15	112,474.12	493,011.59	1,720.37	27,500.00	29,220.37	522,231.96
Iowa	90,000	74,227.20	214,934.48	114,950.00	494,111.68	83.61	46,850.00	46,933.61	541,045.29
Kansas	90,000	53,057.23	148,309.14	56,308.61	347,674.98	.....	12,400.00	12,400.00	360,074.98
Kentucky	90,000	93,378.88	264,036.42	60,200.00	507,615.30	.....	16,500.00	16,500.00	524,115.30
Louisiana	90,000	60,813.78	179,737.59	39,135.00	369,686.37	.....	.....	.....	369,686.37
Maine	90,000	22,270.68	84,908.54	44,170.00	241,349.22	.....	17,500.00	17,500.00	258,849.22
Maryland	90,000	36,488.62	106,679.77	39,040.00	272,208.39	8.46	16,500.00	16,508.46	288,716.85
Massachusetts	90,000	36,698.19	95,538.52	50,200.00	272,436.71	1,089.81	4,000.00	5,089.81	277,526.52
Michigan	90,000	93,777.64	231,003.12	50,617.00	465,397.76	1,797.02	67,500.00	69,297.02	534,694.78
Minnesota	90,000	68,128.03	208,801.71	47,000.00	413,929.74	.....	.....	.....	413,929.74
Mississippi	90,000	80,016.75	263,544.53	67,835.00	501,396.28	.....	27,000.00	27,000.00	528,396.28
Missouri	90,000	78,849.57	232,680.25	44,450.00	445,979.82	.....	13,000.00	13,000.00	458,979.82
Montana	90,000	18,004.00	79,554.23	55,850.00	243,408.23	.....	.....	.....	243,408.23
Nebraska	90,000	41,343.56	130,704.24	46,950.00	308,997.80	.....	5,000.00	5,000.00	313,997.80
Nevada	90,000	3,435.49	50,440.02	26,800.00	170,675.51	.....	.....	.....	170,675.51
New Hampshire	90,000	11,363.43	63,676.97	29,720.00	194,760.40	.....	.....	.....	194,760.40
New Jersey	90,000	32,575.43	94,560.83	54,870.00	272,006.26	.....	9,308.00	9,308.00	281,314.26
New Mexico	90,000	17,027.28	79,600.02	46,450.00	233,077.30	.....	.....	.....	233,077.30
New York:									
Cornell	81,000	97,003.93	209,030.71	103,970.00	491,004.64	3,776.81	7,200.00	10,976.81	501,981.45
State	9,000	10,778.21	23,225.63	20,000.00	63,003.84	.....	.....	.....	63,003.84
North Carolina	90,000	135,186.64	357,881.86	79,340.00	662,408.50	.....	.....	.....	662,408.50
North Dakota	90,000	26,670.28	100,550.54	16,150.00	233,370.82	.....	.....	.....	233,370.82
Ohio	90,000	118,853.05	278,117.96	75,750.00	562,721.01	13.01	11,000.00	11,013.01	573,734.02
Oklahoma	90,000	63,847.68	171,437.82	41,900.00	367,185.50	.....	16,000.00	16,000.00	383,185.50
Oregon	90,000	35,230.21	110,927.06	81,087.00	317,244.27	.....	17,000.00	17,000.00	334,244.27
Pennsylvania	90,000	155,317.78	298,239.36	73,770.00	617,327.14	1,294.60	2,500.00	3,794.60	621,121.74
Puerto Rico	90,000	66,036.41	246,006.87	48,400.00	450,443.28	.....	.....	.....	450,443.28
Rhode Island	90,000	6,257.12	53,250.76	32,820.00	182,327.88	463.49	5,000.00	5,463.49	187,791.37
South Carolina	90,000	68,111.24	202,696.17	44,367.00	405,174.41	.....	.....	.....	405,174.41
South Dakota	90,000	26,510.78	99,453.39	39,300.00	255,264.17	.....	7,500.00	7,500.00	262,764.17
Tennessee	90,000	92,293.90	268,210.82	58,937.00	509,441.72	371.96	8,200.00	8,571.96	518,013.68
Texas	90,000	150,461.58	358,073.99	83,800.00	682,335.57	1,250.00	15,425.00	16,675.00	699,010.57
Utah	90,000	12,499.09	68,925.56	70,850.00	242,274.65	.....	5,000.00	5,000.00	247,274.65
Vermont	90,000	12,884.06	67,964.72	19,600.00	190,448.78	409.22	1,500.00	1,909.22	192,358.00
Virginia	90,000	88,612.55	229,018.54	61,700.00	469,331.09	1,472.65	3,132.00	4,604.65	473,935.74
Washington	90,000	43,950.86	126,177.94	104,500.00	364,628.80	972.71	25,450.00	26,422.71	391,051.51
West Virginia	90,000	65,794.28	165,723.72	49,210.00	370,728.00	.....	2,500.00	2,500.00	373,228.00
Wisconsin	90,000	73,259.15	211,983.49	96,122.27	471,364.91	1,000.00	6,500.00	7,500.00	478,864.91
Wyoming	90,000	7,662.93	59,873.77	41,800.00	199,336.70	.....	12,500.00	12,500.00	211,836.70
Total	4,590,000	2,863,708.00	8,279,999.53	2,864,400.00	18,598,107.53	19,706.09	500,000.00	519,706.09	19,117,813.62

[1] Includes unexpended balances from the previous year as follows:
Hatch--Connecticut, $3.32; Storrs (Conn.), $49.67; New York (State), $4.45: Cornell (New York), $4.85; Puerto Rico, $359.61.
Adams--Indiana, $242.03; New York (State), $2.69; Cornell (New York), $34.32; Puerto Rico, $73.79; Wisconsin, $694.37.
Purnell--Connecticut, $39.83; Storrs (Conn.), $267.87; Indiana, $1,176.43; Maryland, $0.12; New York (State), $1.86; Cornell (New York), $34.42; Puerto Rico, $496.13; Wisconsin, $1,267.94.
Bankhead-Jones, title I:
Section 5--Connecticut, $22.66; Storrs (Conn.), $62.90; Florida, $11.36; Indiana, $1,133.71; New York (State), $3.23; Cornell (New York), $0.54; Puerto Rico, $440.57; Wisconsin, $6,378.48.
Secs. 9(b)1-2--Connecticut, $75.93; Storrs (Conn.), $277.69; Florida, $801.62; Hawaii, $969.65; Illinois, $350.31; Indiana, $2,923.50; New York (State), $16.07; Cornell (New York), $1.53; Puerto Rico, $238.99; Wisconsin, $9,568.71.

[2] Hatch, $15,000 for each State, Alaska, Hawaii, and Puerto Rico. Adams, $15,000 for each State, Alaska, Hawaii, and Puerto Rico. Purnell, $60,000 for each State, Alaska, Hawaii, and Puerto Rico.

TABLE 4.—Non-Federal funds available to the experiment stations for the year ended June 30, 1955

Station	State appropriations	Special endowments, industrial fellowships, etc.	Fees	Sales	Miscellaneous	Balance from previous year	Total
Alabama	$761,763.74	$108,513.61	.....	$616,387.24	$5,746.85	$287,964.32	$1,780,375.76
Alaska	144,000.00	.....	.....	51,028.86	.....	70,138.17	265,167.03
Arizona	448,764.63	50,277.73	.....	85,939.95	.....	.....	584,982.31
Arkansas	498,583.27	43,373.02	.....	182,163.69	.....	164,501.11	888,621.09
California	6,592,153.84	497,800.56	.....	68,546.45	.....	717,599.65	7,876,100.50
Colorado	427,509.11	392,671.72	.....	134,109.75	13,864.10	200,518.64	1,168,673.32
Connecticut:							
State	491,411.04	21,395.00	.....	.....	.....	.....	512,806.04
Storrs	470,589.25	84,904.88	$20,925.00	.....	.....	59,869.00	636,288.13
Delaware	205,025.00	36,561.00	.....	119,675.08	.....	72,294.39	433,555.47
Florida	2,839,611.60	95,790.37	.....	259,541.98	.....	469,059.20	3,664,003.15
Georgia	1,001,230.00	148,487.86	.....	662,248.98	23,596.67	381,155.10	2,216,718.61
Hawaii	488,768.96	.....	.....	61,806.26	26,829.96	10,440.93	587,846.11
Idaho	426,871.96	23,129.60	.....	176,238.92	.....	150,318.31	776,558.79
Illinois	1,633,298.67	199,636.40	.....	361,893.99	.....	.....	2,194,829.06
Indiana	1,171,569.03	154,732.52	255,960.39	623,025.08	29,550.11	385,578.51	2,620,415.64
Iowa	1,538,135.33	377,967.30	.....	506,796.95	.....	573,369.09	2,996,268.67
Kansas	968,585.00	126,754.41	.....	514,544.00	.....	197,415.21	1,807,298.62
Kentucky	580,900.00	192,078.25	74,242.88	154,342.57	.....	.....	1,001,563.70
Louisiana	2,202,933.24	50,298.39	.....	.....	60,295.91	.....	2,313,527.54
Maine	248,500.90	43,866.42	.....	48,572.40	.....	30,167.20	371,106.92
Maryland	464,847.23	123,197.73	.....	136,642.06	.....	95,195.71	819,882.73
Massachusetts	550,598.80	20,875.43	.....	.....	.....	41,559.51	613,033.74
Michigan	1,594,370.00	263,103.61	.....	.....	.....	90,146.16	1,947,619.77
Minnesota	1,680,822.33	246,272.02	7,242.93	560,595.29	.....	.....	2,494,932.57
Mississippi	686,117.02	36,922.34	.....	557,607.81	3,949.00	356,685.04	1,641,281.21
Missouri	323,052.03	68,016.88	160,086.83	147,350.52	.....	286,347.71	984,853.97
Montana	473,608.00	26,472.19	.....	356,138.63	7,512.10	207,453.56	1,071,184.48
Nebraska	765,632.35	97,651.69	.....	588,710.64	.....	51,079.64	1,503,074.32
Nevada	56,136.06	5,411.96	.....	44,471.92	.....	.....	106,019.94
New Hampshire	128,465.25	34,012.40	.....	12,124.45	.....	653.16	175,255.26
New Jersey	1,224,181.43	330,988.87	.....	.....	.....	7,616.85	1,562,787.15
New Mexico	291,808.00	5,550.00	.....	46,328.15	500.00	11,977.33	356,163.48
New York:							
Cornell	2,735,397.39	346,373.20	.....	538,837.09	.....	.....	3,620,607.68
State	1,027,809.08	25,655.65	.....	44,362.48	.....	.....	1,097,827.21
North Carolina	1,411,887.33	46,255.99	.....	148,817.85	114,165.74	.....	1,721,126.91
North Dakota	746,283.49	22,889.33	.....	236,051.48	175,000.00	151,843.04	1,332,067.34
Ohio	1,221,768.32	62,272.57	.....	337,526.10	.....	852,726.18	2,474,293.17
Oklahoma	1,038,473.00	53,760.79	.....	333,070.43	5,182.00	312,372.27	1,742,858.49
Oregon	1,416,214.57	166,336.94	201,706.05	212,433.89	.....	.....	1,996,691.45
Pennsylvania	980,172.11	152,447.22	.....	183,219.27	64,486.87	291,085.15	1,671,410.62
Puerto Rico	1,179,665.00	.....	.....	.....	161,850.00	68,784.87	1,410,299.87
Rhode Island	98,042.45	51,044.12	.....	25,729.42	.....	38,521.72	213,337.71
South Carolina	521,584.63	47,142.33	.....	170,000.00	.....	53,819.53	792,546.49
South Dakota	335,200.00	10,006.79	.....	146,365.99	.....	69,691.98	561,264.76
Tennessee	526,833.93	103,284.89	.....	179,529.75	.....	.....	809,648.57
Texas	1,290,078.13	436,169.68	.....	.....	1,438,993.17	724,402.97	3,889,643.95
Utah	387,500.00	165,476.48	.....	67,230.52	12,021.16	125,391.50	757,619.66
Vermont	113,997.38	.....	.....	1,581.61	4,951.91	41,620.09	162,150.99
Virginia	1,129,884.75	.....	.....	156,504.28	.....	.....	1,286,389.03
Washington	1,629,182.63	189,493.96	.....	407,942.16	.....	.....	2,226,618.75
West Virginia	242,833.00	10,500.00	.....	188,016.94	1,124.88	141,443.84	583,918.66
Wisconsin	1,405,689.00	814,826.00	.....	480,125.00	.....	.....	2,700,640.00
Wyoming	332,974.75	12,717.57	.....	81,880.56	.....	41,089.03	468,661.91
Total	51,151,314.01	6,623,367.67	720,164.08	11,016,056.44	2,149,620.43	7,831,895.67	79,492,418.30

TABLE 5.--Expenditures and appropriations under the Hatch Act (Mar. 2, 1887)[1] for the year ended June 30, 1955

Station	Expenditures													Unexpended	Funds available
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$13,692.61	$28.49	$61.31	$79.50	$229.54	.....	$179.37	$729.18	.....	.....	.....	.....	$15,000.00	.....	$15,000
Alaska	14,068.54	155.45	.....	.....	.....	.....	.....	548.40	$227.61	.....	.....	.....	15,000.00	.....	15,000
Arizona	13,489.79	.....	.....	.....	.....	.....	.....	.....	882.37	.....	$438.76	$189.08	15,000.00	.....	15,000
Arkansas	10,157.67	331.29	90.48	.....	.....	$2,119.02	163.10	1,257.42	691.02	.....	190.00	.....	15,000.00	.....	15,000
California	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Colorado	12,149.65	506.21	.....	8.55	241.92	115.41	201.12	474.43	768.97	.....	533.74	.....	15,000.00	.....	15,000
Connecticut:															
State	4,350.00	.....	.....	.....	.....	3,123.31	.....	.....	.....	.....	.....	.....	7,473.31	$26.69	7,500
Storrs	4,865.84	511.54	.....	.....	.....	.....	10.48	108.14	2,004.00	.....	.....	.....	7,500.00	.....	7,500
Delaware	4,905.80	884.40	97.58	3,718.97	.....	155.80	218.42	2,082.47	2,936.56	.....	.....	.....	15,000.00	.....	15,000
Florida	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Georgia	8,258.26	.....	2.04	.....	29.50	236.65	24.75	3,462.51	2,986.29	.....	.....	.....	15,000.00	.....	15,000
Hawaii	14,122.00	878.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Idaho	10,708.70	1,466.67	.....	11.25	.....	2,544.99	.....	268.39	.....	.....	.....	.....	15,000.00	.....	15,000
Illinois	9,898.65	200.51	20.96	1.40	.....	397.45	50.47	3,496.01	493.57	.....	440.98	.....	15,000.00	.....	15,000
Indiana	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Iowa	14,138.51	.....	.....	.....	.....	861.49	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Kansas	13,420.98	1,395.48	.....	.....	.....	.....	.....	.....	.....	.....	.....	183.30	14,999.76	.24	15,000
Kentucky	11,702.18	783.13	65.89	198.37	.....	788.00	32.00	345.28	935.40	.....	.....	149.75	15,000.00	.....	15,000
Louisiana	14,063.65	52.13	.....	.....	.....	680.01	.....	204.21	.....	.....	.....	.....	15,000.00	.....	15,000
Maine	13,060.23	335.87	5.36	19.20	54.40	413.48	30.35	1,055.65	25.46	.....	.....	.....	15,000.00	.....	15,000
Maryland	9,020.00	2,049.80	3.15	47.44	236.41	894.10	71.24	1,379.14	748.64	$80.85	.....	.....	14,530.77	469.23	15,000
Massachusetts	8,203.20	740.38	3.23	1.36	6.12	517.85	1,611.52	1,591.08	2,325.26	.....	.....	.....	15,000.00	.....	15,000
Michigan	7,500.00	.....	.....	.....	.....	7,500.00	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Minnesota	12,396.64	611.33	.....	14.59	.....	624.79	83.55	859.60	254.54	.....	154.96	.....	15,000.00	.....	15,000
Mississippi	14,091.94	3.20	2.40	55.14	18.36	.....	78.88	750.08	.....	.....	.....	.....	15,000.00	.....	15,000
Missouri	11,665.00	703.82	.....	29.40	77.83	.....	368.00	2,046.60	109.35	.....	.....	.....	15,000.00	.....	15,000
Montana	13,577.97	328.94	13.52	.....	.....	.....	364.74	426.64	281.50	.....	.....	.....	14,993.31	6.69	15,000
Nebraska	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Nevada	10,418.17	448.43	.....	1,024.83	152.97	.....	124.16	2,656.44	175.00	.....	.....	.....	15,000.00	.....	15,000
New Hampshire	14,161.33	93.97	6.18	3.75	.....	.....	5.00	722.86	6.91	.....	.....	.....	15,000.00	.....	15,000
New Jersey	12,612.00	589.61	4.68	14.37	60.00	25.97	206.17	613.73	548.47	325.00	.....	.....	15,000.00	.....	15,000
New Mexico	13,832.07	.....	1.08	37.00	455.34	.....	144.95	266.16	263.40	.....	.....	.....	15,000.00	.....	15,000
New York:															
Cornell	10,127.97	1.10	.....	3.30	23.95	.....	321.40	3,019.10	.....	.....	.....	.....	13,496.82	3.18	13,500
State	1,199.56	.....	.....	.....	220.00	.....	.....	.....	80.00	.....	.....	.....	1,499.56	.44	1,500
North Carolina	11,380.05	140.10	.....	.....	.....	2,210.00	.....	830.54	439.31	.....	.....	.....	15,000.00	.....	15,000
North Dakota	14,300.43	.....	.....	.50	.....	.....	.....	.....	.....	.....	699.07	.....	15,000.00	.....	15,000
Ohio	13,583.54	1,131.87	.....	.....	.....	14.34	.....	232.75	37.50	.....	.....	.....	15,000.00	.....	15,000
Oklahoma	11,394.78	159.78	.....	.....	12.07	.....	532.08	2,901.29	.....	.....	.....	.....	15,000.00	.....	15,000
Oregon	11,490.47	3,320.51	.....	89.85	.....	.....	36.77	62.40	.....	.....	.....	.....	15,000.00	.....	15,000
Pennsylvania	8,328.12	138.58	8.57	.....	.....	5,033.20	.....	752.38	739.15	.....	.....	.....	15,000.00	.....	15,000
Puerto Rico	13,298.50	892.92	4.00	6.00	150.31	.....	.....	473.03	175.24	.....	.....	.....	15,000.00	.....	15,000
Rhode Island	10,164.57	311.54	.....	714.41	.....	2,215.22	426.95	1,017.31	150.00	.....	.....	.....	15,000.00	.....	15,000
South Carolina	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
South Dakota	7,917.63	872.84	21.82	1.70	50.00	4,315.75	43.01	1,077.42	699.83	.....	.....	.....	15,000.00	.....	15,000
Tennessee	14,999.88	.....	.....	.12	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Texas	9,106.25	2,970.20	.....	710.56	.....	.....	15.10	925.01	1,272.88	.....	.....	.....	15,000.00	.....	15,000
Utah	13,674.81	1,029.69	.....	.....	.....	.....	.....	.....	295.50	.....	.....	.....	15,000.00	.....	15,000
Vermont	13,311.14	66.82	11.60	72.46	.....	361.60	31.80	713.72	310.46	93.50	.....	26.90	15,000.00	.....	15,000
Virginia	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Washington	14,061.69	471.85	3.25	.....	.....	.....	139.91	162.57	99.51	.....	.....	.....	14,938.78	61.22	15,000
West Virginia	9,756.14	1,027.40	.....	.....	21.30	2,438.22	847.98	908.88	.....	.....	.....	.....	14,999.92	.08	15,000
Wisconsin	3,776.17	756.00	.....	.....	.....	.....	.....	7,909.81	2,558.02	.....	.....	.....	15,000.00	.....	15,000
Wyoming	14,177.00	.....	.....	.....	.....	474.69	.....	.....	348.31	.....	.....	.....	15,000.00	.....	15,000
Total	610,580.08	26,389.85	427.10	6,864.02	2,040.02	38,061.34	6,363.27	46,330.63	23,870.03	499.35	2,457.51	549.03	764,432.23	567.77	765,000

[1]Extended to Hawaii by act of May 16, 1928; to Alaska by act of Feb. 23, 1929; and to Puerto Rico by act of Mar. 4, 1931.

TABLE 6.--Expenditures and appropriations under the Adams Act (Mar. 16, 1906)[1] for the year ended June 30, 1955

Station	Expenditures												Unexpended	Appropriation
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Other Contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$12,445.40	$171.63	$16.48	$23.55	$535.00	.....	$643.87	$1,164.07	.....	.....	.....	$15,000.00	.....	$15,000
Alaska	13,072.95	886.63	.....	.....	140.00	$216.39	544.50	139.53	.....	.....	.....	15,000.00	.....	15,000
Arizona	11,717.43	1,244.49	2.38	50.22	43.93	176.03	504.26	788.81	.....	$321.36	$151.09	15,000.00	.....	15,000
Arkansas	12,563.46	116.56	83.84	.....	105.00	57.87	1,411.63	231.64	.....	430.00	.....	15,000.00	.....	15,000
California	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Colorado	12,475.81	137.30	4.78	21.78	360.58	271.91	1,145.03	144.39	.....	438.42	.....	15,000.00	.....	15,000
Connecticut:														
State	7,500.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,500.00	.....	7,500
Storrs	7,500.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,500.00	.....	7,500
Delaware	12,501.71	234.76	12.33	.....	.....	292.22	1,243.85	715.13	.....	.....	.....	15,000.00	.....	15,000
Florida	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Georgia	12,538.89	43.27	19.92	.....	.....	50.41	1,038.15	1,309.36	.....	.....	.....	15,000.00	.....	15,000
Hawaii	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Idaho	13,301.73	56.10	7.67	.....	.....	23.04	1,424.28	187.18	.....	.....	.....	15,000.00	.....	15,000
Illinois	13,149.68	49.60	14.10	.....	.....	.....	1,193.14	84.80	.....	508.68	.....	15,000.00	.....	15,000
Indiana	11,816.27	22.80	3.00	.....	20.00	323.25	2,443.83	370.85	.....	.....	.....	15,000.00	.....	15,000
Iowa	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Kansas	14,700.00	.....	.....	.....	.....	.....	71.76	.....	.....	.....	228.24	15,000.00	.....	15,000
Kentucky	11,833.23	202.35	2.60	19.34	.....	23.46	2,744.69	.....	.....	.....	174.33	15,000.00	.....	15,000
Louisiana	12,872.61	507.09	3.71	80.80	.....	72.41	616.65	846.73	.....	.....	.....	15,000.00	.....	15,000
Maine	13,884.21	58.00	.....	7.85	.....	62.95	407.73	579.26	.....	.....	.....	15,000.00	.....	15,000
Maryland	12,200.00	144.62	35.40	.....	.....	68.05	2,056.77	495.16	.....	.....	.....	15,000.00	.....	15,000
Massachusetts	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Michigan	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Minnesota	12,683.45	20.50	4.91	.....	.....	153.23	1,299.01	585.31	.....	253.59	.....	15,000.00	.....	15,000
Mississippi	11,859.84	77.17	22.61	57.79	387.08	389.18	1,925.33	.....	$281.00	.....	.....	15,000.00	.....	15,000
Missouri	10,637.56	36.41	6.95	11.00	.....	206.68	3,533.80	567.60	.....	.....	.....	15,000.00	.....	15,000
Montana	13,783.85	139.40	5.24	1.70	.....	81.13	335.47	653.21	.....	.....	.....	15,000.00	.....	15,000
Nebraska	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Nevada	13,500.39	105.93	4.52	118.80	69.44	108.45	585.27	507.20	.....	.....	.....	15,000.00	.....	15,000
New Hampshire	14,596.14	6.72	8.79	.....	.....	.....	307.32	81.03	.....	.....	.....	15,000.00	.....	15,000
New Jersey	12,448.65	38.45	10.19	4.29	.....	235.89	1,458.11	804.42	.....	.....	.....	15,000.00	.....	15,000
New Mexico	12,941.70	8.75	11.82	23.10	248.77	174.29	1,004.62	586.95	.....	.....	.....	15,000.00	.....	15,000
New York:														
Cornell	9,364.66	.....	.....	.....	.....	220.00	2,390.09	1,518.16	.....	.....	.....	13,492.91	$7.09	13,500
State	672.50	.....	.....	.....	.....	40.00	4.60	782.90	.....	.....	.....	1,500.00	.....	1,500
North Carolina	14,395.44	.....	.....	.....	.....	.....	404.56	200.00	.....	.....	.....	15,000.00	.....	15,000
North Dakota	14,431.05	.....	.....	12.20	.....	.....	16.75	.....	.....	540.00	.....	15,000.00	.....	15,000
Ohio	13,895.50	38.60	23.23	.....	.....	.....	954.49	88.18	.....	.....	.....	15,000.00	.....	15,000
Oklahoma	11,259.29	116.71	.....	.....	.....	286.27	2,741.35	596.38	.....	.....	.....	15,000.00	.....	15,000
Oregon	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Penneylvania	14,472.00	.....	.....	.....	.....	.....	528.00	.....	.....	.....	.....	15,000.00	.....	15,000
Puerto Rico	9,717.11	145.75	38.28	9.00	50.12	165.78	2,500.55	2,258.82	.....	.....	.....	14,885.41	114.59	15,000
Rhode Island	14,074.93	19.81	.....	.....	.....	.....	337.98	567.28	.....	.....	.....	15,000.00	.....	15,000
South Carolina	14,017.50	70.63	.....	.40	.....	130.44	62.71	718.32	.....	.....	.....	15,000.00	.....	15,000
South Dakota	13,496.36	82.98	8.99	.....	.....	26.16	776.44	609.07	.....	.....	.....	15,000.00	.....	15,000
Tennessee	14,999.66	.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Texas	11,536.39	.....	20.83	87.71	181.78	1,853.79	465.51	817.37	36.62	.....	.....	15,000.00	.....	15,000
Utah	15,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Vermont	10,853.05	434.90	17.45	1.43	.....	361.74	2,127.53	1,152.18	.....	.....	21.75	14,970.03	29.97	15,000
Virginia	14,952.63	27.66	.....	.....	.....	.....	19.71	.....	.....	.....	.....	15,000.00	.....	15,000
Washington	14,221.82	254.15	.....	.....	.....	182.00	316.95	25.08	.....	.....	.....	15,000.00	.....	15,000
West Virginia	12,843.91	7.14	16.90	.....	.....	.....	899.56	1,232.49	.....	.....	.....	15,000.00	.....	15,000
Wisconsin	11,750.42	.....	7.20	.....	.....	.....	3,242.38	.....	.....	.....	.....	15,000.00	.....	15,000
Wyoming	14,948.00	52.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000.00	.....	15,000
Total	679,427.18	5,559.20	414.12	530.96	2,141.70	6,253.02	45,728.23	21,408.86	317.62	2,492.05	575.41	764,848.35	151.65	765,000

[1] Extended to Hawaii by act of May 16, 1928; to Puerto Rico by act of Mar. 4, 1931; and to Alaska by act of June 30, 1936.

TABLE 7.--Expenditures and appropriations under the Purnell Act (Feb. 24, 1925)[1] for the year ended June 30, 1955

Station	Expenditures													Unexpended	Appropriation
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$49,307.36	$1,497.15	$58.63	$311.50	$1,009.91	$342.00	$1,337.07	$4,873.66	$1,262.72	.....	.....	.....	$60,000.00	.....	$60.000
Alaska	51,212.59	1,067.65	.....	.....	.....	.....	266.35	4,988.56	1,317.42	$1,147.43	.....	.....	60,000.00	.....	60,000
Arizona	45,289.33	3,076.23	91.56	192.13	21.60	48.79	681.08	6,915.25	1,399.84	216.31	$1,476.30	$591.58	60,000.00	.....	60,000
Arkansas	50,459.13	1,544.24	336.80	.....	172.80	2,196.45	252.00	1,835.12	1,867.48	.....	1,335.98	.....	60,000.00	.....	60,000
California	60,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,000.00	.....	60,000
Colorado	43,640.38	2,162.95	134.54	195.74	540.92	.....	876.11	6,438.26	4,241.09	.....	1,770.01	.....	60,000.00	.....	60,000
Connecticut:															
State	22,650.67	17.85	21.06	.....	.....	690.89	334.61	2,210.48	3,180.47	875.00	.....	.....	29,981.03	$18.97	30,000
Storrs	23,195.51	1,798.45	.....	.....	.....	.....	28.00	813.69	2,991.17	.....	.....	.....	28,826.82	1,173.18	30,000
Delaware	45,111.89	2,961.14	11.06	8.65	60.00	914.10	374.06	9,044.85	1,514.15	.....	.....	.....	59,999.90	.10	60,000
Florida	60,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,000.00	.....	60,000
Georgia	51,859.76	553.96	35.21	.....	.....	495.87	438.85	5,131.91	1,484.44	.....	.....	.....	60,000.00	.....	60,000
Hawaii	60,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,000.00	.....	60,000
Idaho	48,703.58	2,452.95	27.59	1.67	27.00	324.80	237.43	7,645.80	423.56	155.62	.....	.....	60,000.00	.....	60,000
Illinois	50,790.52	3,238.16	3.41	.....	.....	32.89	359.97	2,602.19	993.91	.....	1,978.95	.....	60,000.00	.....	60,000
Indiana	56,077.01	435.06	.....	.....	.....	.....	600.00	2,032.23	838.60	.....	.....	.....	59,982.90	17.10	60,000
Iowa	60,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,000.00	.....	60,000
Kansas	58,780.93	.....	.....	.....	.....	.....	.....	398.97	.....	.....	.....	820.10	60,000.00	.....	60,000
Kentucky	48,985.32	2,887.51	60.98	181.70	.....	1,830.00	227.76	2,550.78	2,559.24	.....	.....	716.71	60,000.00	.....	60,000
Louisiana	50,577.47	1,616.48	103.61	109.15	881.00	1,300.97	399.20	2,589.78	2,422.34	.....	.....	.....	60,000.00	.....	60,000
Maine	49,617.98	501.27	32.20	139.50	.....	.....	412.48	2,967.01	3,829.56	2,500.00	.....	.....	60,000.00	.....	60,000
Maryland	46,824.47	2,473.87	41.66	99.68	85.37	1,140.32	772.86	6,111.96	2,449.81	.....	.....	.....	60,000.00	.....	60,000
Massachusetts	43,425.46	791.06	36.89	.22	260.00	.....	5,192.11	4,147.63	6,146.63	.....	.....	.....	60,000.00	.....	60,000
Michigan	60,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,000.00	.....	60,000
Minnesota	54,869.72	490.74	1.95	109.50	.....	194.68	559.84	2,916.84	369.55	.....	487.18	.....	60,000.00	.....	60,000
Mississippi	46,407.79	1,496.44	85.08	261.59	648.11	1,607.00	671.80	4,360.02	2,530.71	1,931.46	.....	.....	60,000.00	.....	60,000
Missouri	54,287.24	812.69	154.72	5.30	126.27	.....	856.18	3,254.74	502.86	.....	.....	.....	60,000.00	.....	60,000
Montana	50,130.67	689.74	16.02	40.01	22.50	1,395.31	1,128.03	2,158.39	4,385.98	30.00	.....	.....	59,996.65	3.35	60,000
Nebraska	58,875.90	.....	.....	.....	.....	.....	.....	.....	1,124.10	.....	.....	.....	60,000.00	.....	60,000
Nevada	43,668.28	682.06	23.13	285.78	658.60	1,384.20	1,471.70	8,364.46	3,326.24	135.55	.....	.....	60,000.00	.....	60,000
New Hampshire	55,656.62	621.18	37.02	35.20	.....	2.70	73.20	2,115.74	1,458.34	.....	.....	.....	60,000.00	.....	60,000
New Jersey	47,066.40	1,457.70	69.92	12.01	7.28	.....	1,422.52	5,932.31	4,031.86	.....	.....	.....	60,000.00	.....	60,000
New Mexico	49,310.45	1,438.20	45.69	58.40	1,745.02	.....	1,421.12	2,816.54	3,129.73	34.85	.....	.....	60,000.00	.....	60,000
New York:															
Cornell	42,323.73	2,873.49	2.04	77.08	.....	41.25	2,465.90	2,555.47	3,581.36	.....	.....	.....	53,920.32	79.68	54,000
State	4,960.27	.....	.....	.....	.....	.....	23.49	455.45	550.68	.....	.....	.....	5,989.89	10.11	6,000
North Carolina	54,090.28	1,214.17	.....	255.00	.....	.....	251.36	2,239.19	1,950.00	.....	.....	.....	60,000.00	.....	60,000
North Dakota	52,983.13	1,545.61	15.07	6.87	27.60	30.70	170.75	1,810.67	1,416.02	.....	1,993.58	.....	60,000.00	.....	60,000
Ohio	56,249.28	1,018.00	5.84	7.03	.....	8.01	500.43	1,389.17	822.24	.....	.....	.....	60,000.00	.....	60,000
Oklahoma	45,116.81	977.26	80.00	.....	.....	.....	1,679.50	10,482.64	1,663.79	.....	.....	.....	60,000.00	.....	60,000
Oregon	57,478.88	383.01	.....	102.84	.....	80.62	258.52	279.47	1,416.66	.....	.....	.....	60,000.00	.....	60,000
Pennsylvania	50,752.10	134.07	14.97	.....	.....	350.30	214.55	7,365.88	1,168.13	.....	.....	.....	60,000.00	.....	60,000
Puerto Rico	36,177.48	1,966.59	.....	.....	853.16	1,143.73	187.06	4,907.86	14,226.19	.....	.....	.....	59,462.07	537.93	60,000
Rhode Island	47,506.47	325.52	4.02	1.15	34.55	30.31	31.41	10,190.25	1,876.32	.....	.....	.....	60,000.00	.....	60,000
South Carolina	50,593.42	295.15	.....	129.00	.....	1,424.18	341.96	3,033.92	4,182.37	.....	.....	.....	60,000.00	.....	60,000
South Dakota	47,146.58	637.11	56.45	127.08	221.50	2,243.20	376.38	7,347.70	1,844.00	.....	.....	.....	60,000.00	.....	60,000
Tennessee	58,717.87	605.32	.....	2.31	.....	.....	.....	44.50	630.00	.....	.....	.....	60,000.00	.....	60,000
Texas	45,926.89	298.52	16.14	162.63	238.83	700.00	5,014.30	2,350.33	4,448.17	844.19	.....	.....	60,000.00	.....	60,000
Utah	57,722.17	442.77	11.45	.....	.....	.....	128.87	337.46	924.00	433.28	.....	.....	60,000.00	.....	60,000
Vermont	47,566.59	1,010.24	22.37	49.98	339.85	589.16	398.85	3,657.51	4,907.75	.....	.....	65.67	58,607.97	1,392.03	60,000
Virginia	57,361.85	749.68	2.00	27.60	19.20	637.89	6.28	831.50	364.00	.....	.....	.....	60,000.00	.....	60,000
Washington	50,293.10	1,696.47	87.26	36.20	26.00	35.65	1,579.07	1,523.84	3,010.63	.....	.....	.....	58,288.22	1,711.78	60,000
West Virginia	50,783.83	482.50	52.31	.....	31.21	815.20	189.00	5,551.01	2,091.21	.....	.....	.....	59,996.27	3.73	60,000
Wisconsin	58,527.07	655.65	.....	.....	.....	.....	.....	817.28	.....	.....	.....	.....	60,000.00	.....	60,000
Wyoming	59,506.10	220.46	5.03	40.06	.....	.....	15.85	212.50	.....	.....	.....	.....	60,000.00	.....	60,000
Total	2,628,566.33	54,296.32	1,803.68	3,072.56	8,058.28	22,031.17	34,227.86	172,600.77	110,855.32	8,303.69	9,042.00	2,194.06	3,055,052.04	4,947.96	3,060,000

[1] Extended to Hawaii by act of May 16, 1928; to Alaska by act of Feb. 23, 1929; and to Puerto Rico by act of Mar. 4, 1931.

TABLE 8.--Expenditures and appropriations under the Bankhead-Jones Act, title I, sec. 5 for the year ended June 30, 1955

Station	Expenditures													Unexpended	Appropriation
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$73,396.22	$3,489.93	$47.87	$176.15	$747.71	.....	$1,102.65	$7,496.21	$1,849.15	.....	.....	.....	$88,305.89	.....	$88,305.89
Alaska	3,978.58	.....	.....	.....	.....	.....	13.50	183.97	560.35	.....	.....	.....	4,736.40	.....	4,736.40
Arizona	10,803.33	3,000.82	.....	28.32	.....	$12.00	80.08	851.30	1,366.22	.....	$392.44	$206.17	16,740.68	.....	16,740.68
Arkansas	54,841.87	1,196.76	754.02	.....	367.80	2,603.51	373.70	2,837.97	2,217.82	.....	993.75	.....	66,187.20	.....	66,187.20
California	102,716.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	102,716.44	.....	102,716.44
Colorado	19,218.95	218.14	7.10	26.75	670.62	.....	355.98	1,818.43	2,370.70	.....	773.49	.....	25,460.16	.....	25,460.16
Connecticut:															
State	8,578.34	140.79	.....	.....	.....	112.59	142.50	1,378.60	857.84	.....	.....	.....	11,210.66	$46.53	11,257.19
Storrs	7,980.00	.....	.....	.....	.....	.....	.....	3,127.19	150.00	.....	.....	.....	11,257.19	.....	11,257.19
Delaware	4,730.78	223.84	3.35	.....	.....	13.50	82.05	678.99	237.51	.....	.....	.....	5,970.02	.....	5,970.02
Florida	45,751.75	154.35	.....	10.00	.....	.....	.....	1,957.27	.....				47,873.37	173.39	48,046.76
Georgia	76,723.00	1,779.29	60.09	.50	259.66	.....	1,466.30	14,146.19	3,967.92	.....	.....	.....	98,402.95	.....	98,402.95
Hawaii	10,463.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,463.17	.....	10,463.17
Idaho	14,445.59	530.88	.....	.....	4.28	.....	1.00	1,867.82	16.62	.....	.....	.....	16,866.19	.....	16,866.19
Illinois	81,750.07	1,450.57	71.85	19.80	.....	.....	318.87	8,068.72	4,367.84	.....	3,378.98	.....	99,426.70	52.25	99,478.95
Indiana	71,680.08	232.10	4.94	3.90	.....	.....	994.89	5,108.70	820.54	.....	.....	.....	78,845.15	296.17	79,141.32
Iowa	65,606.33	.....	.....	.....	.....	.....	.....	.....	173.91	$8,446.96	.....	.....	74,227.20	.....	74,227.20
Kansas	51,960.00	.....	.....	.....	.....	.....	.....	330.41	.....	.....	.....	766.82	53,057.23	.....	53,057.23
Kentucky	77,307.46	1,063.56	66.52	49.50	.....	679.37	3,403.44	6,832.94	2,925.83	.....	.....	1,050.26	93,378.88	.....	93,378.88
Louisiana	45,376.41	1,946.06	12.17	98.43	5.55	295.00	283.22	6,198.98	6,597.96	.....	.....	.....	60,813.78	.....	60,813.78
Maine	19,854.66	676.54	.....	13.85	.44	16.07	69.86	919.10	720.16	.....	.....	.....	22,270.68	.....	22,270.68
Maryland	27,665.00	788.62	53.20	13.68	45.22	42.23	186.83	6,549.92	1,143.92	.....	.....	.....	36,488.62	.....	36,488.62
Massachusetts	30,946.23	426.46	74.50	.....	.....	.....	185.40	2,536.82	2,528.78	.....	.....	.....	36,698.19	.....	36,698.19
Michigan	93,777.64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93,777.64	.....	93,777.64
Minnesota	54,249.68	2,473.74	169.72	34.00	356.67	530.30	1,284.35	4,853.56	3,628.68	.....	547.33	.....	68,128.03	.....	68,128.03
Mississippi	63,629.68	1,222.25	85.22	180.89	710.77	381.13	1,169.91	7,462.17	3,592.61	1,582.12	.....	.....	80,016.75	.....	80,016.75
Missouri	58,951.41	1,124.94	120.80	161.97	355.34	53.22	1,849.65	14,049.33	2,182.91	.....	.....	.....	78,849.57	.....	78,849.57
Montana	17,114.50	15.15	.....	28.75	.....	.....	337.11	505.07	.....	3.42	.....	.....	18,004.00	.....	18,004.00
Nebraska	40,565.56	.....	.....	.....	.....	.....	400.00	.....	378.00	.....	.....	.....	41,343.56	.....	41,343.56
Nevada	1,582.92	23.75	.....	2.98	103.40	.....	467.97	418.31	745.34	90.82	.....	.....	3,435.49	.....	3,435.49
New Hampshire	9,605.69	219.50	1.40	3.20	.....	.....	.....	548.96	984.68	.....	.....	.....	11,363.43	.....	11,363.43
New Jersey	24,640.88	635.76	.....	139.70	120.00	39.20	404.50	5,060.59	1,534.80	.....	.....	.....	32,575.43	.....	32,575.43
New Mexico	13,973.98	.....	.....	3.50	.....	.....	651.95	1,765.70	100.00	532.15	.....	.....	17,027.28	.....	17,027.28
New York:															
Cornell	70,865.77	2,485.35	12.57	44.09	40.95	161.50	3,933.16	14,189.74	5,270.78	.....	.....	.....	97,003.91	.02	97,003.93
State	9,621.84	.....	.....	.....	.....	.....	64.41	452.21	639.75	.....	.....	.....	10,778.21	.....	10,778.21
North Carolina	123,260.04	2,314.11	20.00	120.00	19.21	.....	1,316.31	5,771.49	2,365.48	.....	.....	.....	135,186.64	.....	135,186.64
North Dakota	25,112.15	91.09	.....	8.24	.....	.....	38.85	258.86	287.59	.....	873.50	.....	26,670.28	.....	26,670.28
Ohio	110,274.62	2,283.09	3.56	.....	.....	86.90	81.06	3,617.55	2,506.27	.....	.....	.....	118,853.05	.....	118,853.05
Oklahoma	46,088.80	1,597.10	.....	.....	11.00	.....	1,127.29	12,582.19	2,441.30	.....	.....	.....	63,847.68	.....	63,847.68
Oregon	30,847.99	547.88	.....	5.95	3.00	.....	610.06	1,562.32	1,653.01	.....	.....	.....	35,230.21	.....	35,230.21
Pennsylvania	131,576.22	1,606.30	90.57	14.20	160.98	1,643.50	408.55	12,809.54	7,007.92	.....	.....	.....	155,317.78	.....	155,317.78
Puerto Rico	43,170.66	456.42	.....	.....	.....	.....	125.91	18,047.73	3,416.84	.....	.....	.....	65,217.56	818.85	66,036.41
Rhode Island	5,951.84	99.23	.....	.....	.....	.....	.....	.....	206.05	.....	.....	.....	6,257.12	.....	6,257.12
South Carolina	56,121.86	190.09	20.78	148.52	33.89	.....	638.21	4,919.01	6,038.88	.....	.....	.....	68,111.24	.....	68,111.24
South Dakota	20,737.50	382.98	11.46	.....	5.50	458.84	271.54	3,415.35	1,227.61	.....	.....	.....	26,510.78	.....	26,510.78
Tennessee	83,757.71	1,165.24	23.21	.....	93.70	.....	1,446.85	5,460.78	346.41	.....	.....	.....	92,293.90	.....	92,293.90
Texas	111,771.78	3,396.34	86.39	590.77	546.75	1,716.93	13,181.47	10,823.75	8,158.79	188.61	.....	.....	150,461.58	.....	150,461.58
Utah	11,263.34	656.70	3.89	.....	.....	.....	42.45	268.61	264.10	.....	.....	.....	12,499.09	.....	12,499.09
Vermont	10,465.75	167.76	.10	74.75	84.29	.....	79.96	679.03	1,292.45	.....	.....	23.69	12,867.78	16.28	12,884.06
Virginia	87,089.46	113.33	.....	.....	.....	.....	5.01	1,325.50	79.25	.....	.....	.....	88,612.55	.....	88,612.55
Washington	35,789.74	173.52	28.00	.10	.....	.....	158.24	4,626.08	3,175.18	.....	.....	.....	43,950.86	.....	43,950.86
West Virginia	54,444.78	2,559.41	17.50	.....	10.86	1,106.12	410.21	6,554.31	691.09	.....	.....	.....	65,794.28	.....	65,794.28
Wisconsin	60,303.65	261.53	54.88	.....	151.59	41.42	583.42	8,851.74	3,010.92	.....	.....	.....	73,259.15	.....	73,259.15
Wyoming	7,560.00	102.93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,662.93	.....	7,662.93
Total	2,419,941.70	43,684.20	1,905.66	2,002.49	4,909.18	9,993.33	40,148.67	223,769.01	96,099.76	10,844.08	6,959.49	2,046.94	2,862,304.51	1,403.49	2,863,708.00

TABLE 9.--Expenditures and funds available under the Bankhead-Jones Act, title I, secs. 9(b)1 and 9(b)2, for the year ended June 30, 1955

Station	Expenditures													Unexpended	Appropriation
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$160,374.12	$14,086.42	$872.47	$1,005.46	$2,843.55	$819.79	$6,928.37	$33,163.77	$25,963.14	$9,129.24	.....	.....	$255,186.33	.....	$255,186.33
Alaska	45,660.41	1,211.77	.....	.....	.....	309.60	144.04	2,610.24	428.59	.....	.....	.....	50,364.65	.....	50,364.65
Arizona	46,215.89	4,195.59	119.57	229.92	296.60	102.19	1,344.04	7,482.83	10,389.48	.....	$1,471.52	$729.54	72,577.17	.....	72,577.17
Arkansas	143,656.43	2,820.14	1,541.42	.....	3,673.99	1,753.99	2,969.50	23,016.12	30,424.53	133.80	1,793.10	.....	211,783.02	.....	211,783.02
California	220,738.74	.....	.....	.....	.....	.....	.....	3,176.17	6,172.98	.....	.....	.....	230,087.89	.....	230,087.89
Colorado	57,905.03	3,592.60	546.89	116.83	519.75	12.55	2,664.24	10,644.70	17,459.75	660.00	1,798.19	.....	95,920.53	.....	95,920.53
Connecticut:															
State	22,625.49	424.29	.....	.....	.....	936.06	696.16	5,749.99	8,198.45	.....	.....	.....	38,630.44	$147.78	38,778.22
Storrs	22,408.92	726.71	.....	.....	190.32	2.75	812.55	3,353.33	10,786.28	.....	.....	.....	38,280.86	497.36	38,778.22
Delaware	47,335.53	2,355.66	24.38	.....	.....	31.30	2,296.30	2,110.07	1,411.24	.....	.....	.....	55,564.48	150.00	55,714.48
Florida	69,723.10	3,707.46	99.34	.....	578.48	.....	279.64	5,338.80	30,385.16	3,027.00	.....	.....	113,138.98	12,248.86	125,387.84
Georgia	230,197.10	5,487.86	95.98	1.92	1,702.22	17.00	1,526.93	15,742.40	9,321.34	.....	.....	.....	264,092.75	.....	264,092.75
Hawaii	53,252.42	2,719.54	171.47	100.64	.....	118.95	766.79	1,597.42	6,456.12	.....	.....	.....	65,183.35	1,756.22	66,939.57
Idaho	58,260.31	5,680.32	246.63	76.70	152.15	37.45	306.07	13,375.77	5,011.80	.....	.....	.....	83,147.20	383.55	83,530.75
Illinois	142,888.35	6,710.96	270.98	163.48	.....	172.28	2,479.04	54,279.72	31,900.32	.....	3,978.64	.....	242,843.77	1,137.13	243,980.90
Indiana	153,024.89	3,090.82	374.97	64.36	47.82	.....	952.75	34,646.74	18,343.23	386.84	.....	.....	210,932.42	463.73	211,396.15
Iowa	208,539.32	.....	.....	.....	.....	.....	.....	473.71	.....	5,921.45	.....	.....	214,934.48	.....	214,934.48
Kansas	141,666.00	647.55	.....	.32	.....	.....	133.50	3,856.84	.....	.....	.....	2,004.93	148,309.14	.....	148,309.14
Kentucky	162,819.77	6,823.86	340.77	487.12	12.50	5,146.17	4,650.05	39,096.58	42,415.04	.....	.....	2,244.56	264,036.42	.....	264,036.42
Louisiana	104,578.61	6,621.41	702.94	110.56	1,667.58	62.24	5,206.13	28,968.50	31,819.62	.....	.....	.....	179,737.59	.....	179,737.59
Maine	63,273.57	5,806.05	48.99	356.10	548.93	19.14	628.87	8,431.58	3,295.31	2,500.00	.....	.....	84,908.54	.....	84,908.54
Maryland	55,583.95	5,293.27	128.23	126.19	166.31	703.64	1,673.64	22,221.38	19,667.25	1,115.91	.....	.....	106,679.77	.....	106,679.77
Massachusetts	56,143.01	2,394.17	221.81	8.81	.....	3.75	7,227.32	19,752.30	9,787.35	.....	.....	.....	95,538.52	.....	95,538.52
Michigan	212,533.30	985.40	166.79	88.40	151.73	44.40	2,436.33	8,629.41	5,967.36	.....	.....	.....	231,003.12	.....	231,003.12
Minnesota	145,812.10	7,412.53	132.92	216.43	74.72	3,048.52	3,455.02	19,868.00	28,736.12	36.48	8.87	.....	208,801.71	.....	208,801.71
Mississippi	189,620.41	6,658.79	337.90	1,130.94	3,691.46	447.14	5,890.60	32,707.71	15,437.65	7,621.93	.....	.....	263,544.53	.....	263,544.53
Missouri	165,681.74	5,585.72	540.05	781.48	1,190.03	.....	8,675.16	38,126.57	12,099.50	.....	.....	.....	232,680.25	.....	232,680.25
Montana	54,286.55	2,780.83	30.45	35.40	.....	1,325.74	4,097.42	8,634.87	7,885.29	473.40	.....	.....	79,549.95	4.28	79,554.23
Nebraska	124,665.67	1,872.99	16.04	.....	.....	35.20	1,527.66	1,475.33	1,111.35	.....	.....	.....	130,704.24	.....	130,704.24
Nevada	28,622.67	670.91	96.77	213.50	1,679.98	.....	986.94	9,432.55	8,117.41	619.29	.....	.....	50,440.02	.....	50,440.02
New Hampshire	52,583.30	17.05	32.13	.....	.....	21.70	371.88	9,948.53	702.38	.....	.....	.....	63,676.97	.....	63,676.97
New Jersey	59,620.42	1,477.43	267.22	26.45	96.00	.....	4,966.65	6,266.19	20,310.67	1,529.80	.....	.....	94,560.83	.....	94,560.83
New Mexico	61,609.09	1,543.02	346.77	134.91	1,180.70	.....	1,974.80	8,566.18	4,221.32	23.23	.....	.....	79,600.02	.....	79,600.02
New York:															
Cornell	110,048.46	9,376.71	219.92	195.94	1,694.76	128.00	12,099.32	36,846.94	38,420.17	.....	.....	.....	209,030.22	.49	209,030.71
State	16,505.92	114.57	15.08	.....	120.00	.....	781.48	2,986.83	2,685.89	.....	.....	.....	23,209.77	15.86	23,225.63
North Carolina	298,900.61	2,727.46	45.00	716.52	208.51	462.42	3,372.01	16,529.80	25,269.53	9,650.00	.....	.....	357,881.86	.....	357,881.86
North Dakota	75,905.68	3,333.66	64.96	9.18	1,649.23	16.27	991.56	7,765.66	9,065.84	.....	1,748.50	.....	100,550.54	.....	100,550.54
Ohio	239,980.00	11,728.13	140.29	76.14	339.67	382.77	1,200.33	8,015.95	16,254.68	.....	.....	.....	278,117.96	.....	278,117.96
Oklahoma	127,702.17	2,459.30	71.10	1,342.76	1,313.38	.....	2,515.34	19,440.83	16,592.94	.....	.....	.....	171,437.82	.....	171,437.82
Oregon	95,988.87	2,889.84	52.38	535.20	.....	.....	1,286.52	6,440.41	3,733.84	.....	.....	.....	110,927.06	.....	110,927.06
Pennsylvania	164,818.35	7,588.92	229.80	526.36	259.38	2,674.37	1,332.29	57,267.46	34,329.98	29,212.45	.....	.....	298,239.36	.....	298,239.36
Puerto Rico	155,016.40	5,088.17	67.91	54.00	851.61	55.00	568.69	43,097.84	37,184.65	1,317.99	.....	.....	243,302.26	2,704.61	246,006.87
Rhode Island	33,535.05	968.02	15.65	80.00	846.04	1,666.00	1,052.31	6,549.97	2,537.72	.....	.....	.....	53,250.76	.....	53,250.76
South Carolina	133,962.18	4,564.90	125.06	711.45	724.52	2,051.09	2,770.65	25,915.00	24,348.64	7,522.68	.....	.....	202,696.17	.....	202,696.17
South Dakota	71,111.42	1,825.95	121.47	192.66	191.50	3,208.41	977.41	17,819.20	4,005.37	.....	.....	.....	99,453.39	.....	99,453.39
Tennessee	214,020.56	8,445.30	172.25	341.53	182.65	347.04	2,805.90	17,594.28	24,145.31	156.00	.....	.....	268,210.82	.....	268,210.82
Texas	207,140.89	17,715.27	466.95	2,276.92	1,786.63	2,383.60	34,968.44	32,709.11	53,973.14	4,653.04	.....	.....	358,073.99	.....	358,073.99
Utah	57,052.10	1,761.21	147.56	.....	84.38	308.70	762.20	7,294.52	496.96	1,017.93	.....	.....	68,925.56	.....	68,925.56
Vermont	46,397.82	2,670.25	95.86	56.23	357.35	893.25	324.35	4,555.77	11,735.97	12.69	.....	54.42	67,153.96	810.76	67,964.72
Virginia	185,245.66	4,171.64	88.30	209.00	748.91	804.76	3,197.87	8,993.62	25,558.78	.....	.....	.....	229,018.54	.....	229,018.54
Washington	76,503.89	5,681.73	384.77	23.59	27.00	31.44	4,275.96	23,845.57	14,916.75	331.85	.....	.....	126,022.55	155.39	126,177.94
West Virginia	138,125.52	6,428.43	216.11	27.00	183.30	775.74	137.26	12,858.46	6,869.70	98.57	.....	.....	165,720.09	3.63	165,723.72
Wisconsin	120,892.59	6,777.84	228.74	26.72	1,235.21	82.33	2,002.23	35,894.43	32,799.75	12,043.65	.....	.....	211,983.49	.....	211,983.49
Wyoming	41,717.60	4,399.07	87.74	281.97	.....	1.25	713.76	4,131.40	8,060.13	480.85	.....	.....	59,873.77	.....	59,873.77
Total	5,978,477.95	224,117.49	10,830.78	13,159.09	33,268.85	31,443.99	156,204.27	879,297.35	817,211.77	99,676.07	10,798.82	5,033.45	8,259,519.88	20,479.65	8,279,999.53

TABLE 10.--Expenditures and funds available under the Bankhead-Jones Act, title I, sec. 9(b)3, for the year ended June 30, 1955

Station	Expenditures													Unexpendad	Funds available
	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total expenditures		
Alabama	$49,292.20	$1,956.59	$51.45	$156.08	$674.02	$1,404.76	$731.57	$4,789.54	$1,743.79	.....	.....	.....	$60,800.00	.....	$60,800.00
Alaska	4,502.61	492.14	.....	.....	.....	.....	.....	.....	5.25	.....	.....	.....	5,000.00	.....	5,000.00
Arizona	34,635.20	2,131.33	54.17	133.16	926.34	215.70	1,751.98	3,728.64	5,316.15	$229.75	$1,020.53	$537.96	50,680.91	$2,369.09	53,050.00
Arkansas	35,588.33	2,803.63	259.74	.....	1,178.51	10.90	341.05	2,887.79	2,894.62	.....	270.43	.....	46,235.00	.....	46,235.00
California	57,569.64	4,813.38	13.29	40.01	.....	911.58	961.02	1,628.61	2,512.47	.....	.....	.....	68,450.00	.....	68,450.00
Colorado	46,517.98	9,462.78	740.54	842.44	1,057.04	1,104.50	1,688.08	8,810.19	8,170.16	355.65	850.64	.....	79,600.00	.....	79,600.00
Connecticut:															
State	3,000.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,000.00	.....	3,000.00
Storrs	26,275.67	1,952.30	2.59	.....	5.00	22.22	504.51	4,563.65	12,702.26	.....	.....	.....	46,028.20	341.80	46,370.00
Delaware	4,642.47	295.18	16.16	.....	.....	.....	2,112.13	3,566.64	767.42	.....	.....	.....	11,400.00	.....	11,400.00
Florida	15,882.80	3,291.91	2.77	.....	1,211.49	.....	11.80	2,484.41	1,200.00	.....	.....	.....	24,085.18	3,614.82	27,700.00
Georgia	59,919.48	4,672.04	57.97	108.67	444.03	618.55	2,283.24	14,683.68	6,207.15	8,891.19	.....	.....	97,886.00	.....	97,886.00
Hawaii	6,035.71	1,744.61	148.46	.....	.....	.....	34.55	733.63	1,259.73	350.00	.....	.....	10,306.69	2,693.31	13,000.00
Idaho	37,320.44	3,123.37	8.44	45.57	203.50	.....	42.15	5,865.92	3,390.61	.....	.....	.....	50,000.00	.....	50,000.00
Illinois	46,351.07	4,910.34	36.08	102.20	4.44	479.70	9,200.61	6,749.42	1,196.47	.....	.....	.....	69,030.33	2,485.67	71,516.00
Indiana	53,005.46	6,477.20	385.53	63.57	1,696.98	2,096.18	2,502.12	29,836.43	10,554.48	4,888.84	.....	.....	111,506.79	967.33	112,474.12
Iowa	52,201.24	10,824.96	416.69	674.16	.....	2,628.91	988.23	18,310.71	7,428.65	21,460.11	.....	.....	114,933.66	16.34	114,950.00
Kansas	29,853.18	8,678.79	16.00	24.01	11.00	6.09	3,297.10	11,463.43	2,563.48	.....	.....	393.86	56,306.94	1.67	56,308.61
Kentucky	34,380.35	2,043.05	82.82	232.74	.....	17.00	760.86	11,242.09	7,886.74	.....	.....	456.07	57,101.72	3,098.28	60,200.00
Louisiana	27,257.10	1,458.02	322.19	15.85	181.92	345.93	462.15	5,880.60	3,211.24	.....	.....	.....	39,135.00	.....	39,135.00
Maine	35,285.83	3,864.42	30.32	92.55	.....	.....	20.40	2,370.04	2,506.44	.....	.....	.....	44,170.00	.....	44,170.00
Maryland	17,712.71	2,978.95	74.21	102.43	191.87	42.07	1,514.87	9,104.57	5,152.22	.....	.....	.....	36,873.90	2,166.10	39,040.00
Massachusetts	25,080.59	2,225.17	235.01	.50	.....	.....	7,442.43	5,415.38	9,734.18	.....	.....	.....	50,133.26	66.74	50,200.00
Michigan	37,572.43	2,026.99	53.36	40.45	70.00	2,440.10	1,297.29	4,320.49	2,558.26	.....	.....	.....	50,379.37	237.63	50,617.00
Minnesota	35,091.47	4,183.07	98.24	3.66	70.32	327.23	2,143.84	3,263.40	1,818.77	.....	.....	.....	47,000.00	.....	47,000.00
Mississippi	51,618.23	4,118.72	89.69	268.61	581.26	580.78	2,050.72	5,440.42	1,997.57	480.00	.....	.....	67,226.00	609.00	67,835.00
Missouri	31,505.05	3,469.51	87.98	196.83	105.55	.....	1,729.11	5,453.04	1,902.93	.....	.....	.....	44,450.00	.....	44,450.00
Montana	39,769.57	3,385.84	81.01	95.47	.....	57.99	3,187.58	3,045.80	5,110.72	.....	.....	.....	54,733.98	1,116.02	55,850.00
Nebraska	38,330.35	2,112.23	.....	247.76	540.00	1,202.45	402.65	2,130.39	1,984.17	.....	.....	.....	46,950.00	.....	46,950.00
Nevada	13,135.82	2,950.26	17.07	19.06	27.23	.....	728.40	3,908.97	5,863.19	150.00	.....	.....	26,800.00	.....	26,800.00
New Hampshire	12,106.14	2,215.08	90.80	28.39	.....	197.00	849.80	10,797.57	3,435.22	.....	.....	.....	29,720.00	.....	29,720.00
New Jersey	26,208.27	4,784.88	42.15	.32	72.00	923.60	2,507.26	7,151.17	11,425.18	1,327.00	.....	.....	54,441.83	428.17	54,870.00
New Mexico	32,045.03	2,596.60	131.83	202.92	569.70	.....	1,400.78	6,397.48	3,105.66	.....	.....	.....	46,450.00	.....	46,450.00
New York:															
Cornell	49,573.08	11,839.24	71.98	278.51	344.77	1,594.75	2,946.95	20,500.83	16,317.56	.....	.....	.....	103,467.67	502.33	103,970.00
State	14,410.48	851.96	18.98	100.00	.....	.....	192.20	1,952.78	2,441.39	.....	.....	.....	19,967.79	32.21	20,000.00
North Carolina	66,848.90	894.12	.....	.15	1,500.00	1,425.00	2,531.92	2,035.21	4,104.70	.....	.....	.....	79,340.00	.....	79,340.00
North Dakota	11,414.68	2,061.84	41.29	46.85	65.16	.....	520.49	1,754.92	125.27	.....	119.50	.....	16,150.00	.....	16,150.00
Ohio	65,641.70	7,075.42	3.76	4.12	.....	86.34	2,149.82	714.22	74.62	.....	.....	.....	75,750.00	.....	75,750.00
Oklahoma	29,218.71	2,127.65	.....	.....	122.94	.....	662.57	5,806.70	3,961.43	.....	.....	.....	41,900.00	.....	41,900.00
Oregon	63,113.30	5,265.00	84.44	590.27	15.00	607.35	3,023.16	4,200.61	3,405.96	.....	.....	.....	80,305.09	781.91	81,087.00
Pennsylvania	39,900.40	5,571.50	66.31	139.53	68.95	.....	497.67	20,412.36	6,989.81	.....	.....	.....	73,646.53	123.47	73,770.00
Puerto Rico	14,462.13	1,918.10	4.00	.....	.....	857.00	161.85	8,318.54	12,232.56	.....	.....	.....	37,954.18	10,445.82	48,400.00
Rhode Island	28,757.00	1,708.04	.....	15.00	21.00	.....	302.96	1,050.10	965.90	.....	.....	.....	32,820.00	.....	32,820.00
South Carolina	28,581.81	865.53	54.78	72.09	85.13	30.14	1,172.01	5,919.39	7,586.12	.....	.....	.....	44,367.00	.....	44,367.00
South Dakota	27,858.88	1,036.10	136.84	31.29	100.00	36.96	493.31	7,782.46	1,824.16	.....	.....	.....	39,300.00	.....	39,300.00
Tennessee	42,805.79	1,481.15	31.65	41.69	1.89	.....	554.12	8,850.72	4,187.49	982.50	.....	.....	58,937.00	.....	58,937.00
Texas	51,805.75	1,913.79	35.83	553.02	544.02	66.33	3,327.87	10,698.59	14,854.80	.....	.....	.....	83,800.00	.....	83,800.00
Utah	41,671.99	2,731.24	261.06	64.83	1,039.96	62.26	1,213.18	15,654.75	6,325.80	1,824.93	.....	.....	70,850.00	.....	70,850.00
Vermont	14,447.34	2,113.68	10.64	76.08	124.46	29.83	19.56	1,573.81	928.39	.....	.....	66.87	19,390.66	209.34	19,600.00
Virginia	52,248.58	2,311.67	.....	136.20	196.00	.....	5,050.74	1,466.71	290.10	.....	.....	.....	61,700.00	.....	61,700.00
Washington	56,584.13	9,904.21	237.91	25.10	383.50	94.38	5,394.27	11,393.24	12,831.76	.....	.....	.....	96,848.50	7,651.50	104,500.00
West Virginia	30,714.13	7,295.03	26.51	45.00	1.80	375.84	470.13	6,371.35	1,964.89	1,547.83	.....	.....	48,812.51	397.49	49,210.00
Wisconsin	50,417.76	8,658.20	239.74	68.64	692.03	54.63	696.85	16,096.48	6,716.54	7,571.59	.....	.....	91,212.46	4,909.81	96,122.27
Wyoming	17,928.75	2,783.23	25.09	514.58	.....	.....	437.48	7,594.13	12,316.74	200.00	.....	.....	41,800.00	.....	41,800.00
Total	1,818,097.71	192,450.04	4,997.37	6,540.36	15,128.81	20,954.05	84,767.39	366,172.00	256,051.17	50,259.39	2,261.10	1,454.76	2,819,134.15	45,265.85	2,864,400.00

TABLE 11.--Expenditures from non-Federal funds for the year ended June 30, 1955

Station	Personal services	Travel	Transportation of things	Communication service	Rents and utility services	Printing and reproduction	Other contractual services	Supplies and materials	Equipment	Lands and structures (contractual)	Contributions to retirement	Taxes and assessments	Total	Unexpended balances
Alabama	$718,969.38	$35,594.96	$5,865.85	$10,572.62	$29,833.11	$5,870.24	$117,367,99	$393,738.39	$99,648.18	$44,803.68	$7,763.19	.....	$1,470,027.59	$310,348.17
Alaska	126,872.42	1,497.30	1,887.21	260.10	813.21	620.85	15,895.02	20,714.49	4,345.03	18,574.67	.....	$3,073.97	194,554.27	70,612.76
Arizona	372,956.89	12,862.76	732.85	4,944.88	15,004.20	7,208.69	21,169.49	56,844.91	49,369.95	2,927.27	1,017.39	5,856.40	550,895.68	34,086.63
Arkansas	412,033.89	4,653.08	4,335.24	6,626.95	26,872.86	8,104.94	25,594.93	155,696.45	49,974.32	.....	.....	7,432.80	701,325.46	186,014.49
California	5,513.818.38	270,455.39	.....	85,757.15	65,542.64	81,542.21	222,237.80	491,663.51	394,065.93	.....	.....	.....	7,125,083.01	751,017.49
Colorado	505,606.44	20,445.85	3,324.28	6,762.38	30,043.13	5,958.60	122,354.41	177,469.04	71,318.22	25,163.32	12,921.10	.....	981,366.77	187,306.55
Connecticut:														
Stats	345,936.15	2,145.57	248.92	3,414.77	10,605.65	4,097.35	7,787.35	27,309.49	16,635.96	73,477.01	.....	.....	491,658.22	21,147.82
Storrs	367,085.25	4,193.49	255.82	93.05	3,668.68	5,401.98	4,624.25	58,342.42	13,725.86	112,400.00	.....	.....	569,790.80	66,497.33
Dslaware	197,599.78	6,150.59	2,138.77	2,010.84	7,901.08	2,723.58	41,894.14	87,522.17	20,190.89	3,854.00	.....	.....	371,985.84	61,569.63
Florida	2,338,613.29	91,810.44	5,129.01	23,868.14	54,408.65	10,229.82	90,614.20	464,196.06	259,670.53	82,086.77	.....	.....	3,420,626.91	243,376.24
Gsorgia	948,182.22	28,466.18	1,856.54	13,839.00	58,432.38	18,382.27	35,193.66	547,499.64	133,166.34	128,004.03	4,538.15	55,481.33	1,973,041.74	243,676.87
Hawaii	406,847.09	6,005.68	1,171.93	3,095.68	10,029.61	7,464.43	24,599.49	78,431.60	18,574.28	12,313.18	.....	.....	568,532.97	19,313.14
Idaho	358,340.62	13,823.98	5,500.00	10,800.00	13,000.00	2,000.00	4,000.00	127,962.40	43,675.59	28,121.93	.....	800.00	608,024.52	168,534.27
Illinois	1,592,581.26	90,000.00	.....	30,000.00	.....	70,000.00	45,000.00	306,240.95	55,196.33	5,810.52	.....	.....	2,194,829.06	.....
Indiana	1,327,114.56	48,096.59	.....	21,652.05	43,278.94	20,147.47	126,185.90	611,238.04	140,198.73	89,676.54	.....	.....	2,427,588.82	192,826.82
Iowa	1,085,469.94	108,490.66	5,667.80	11,805.82	18,571.96	24,340.34	.....	788,179.43	112,221.21	229,182.94	83,237.76	.....	2,467,167.86	529,100.81
Kansas	978,749.34	28,332.47	3,069.08	6,761.25	35,923.67	14,477.76	61,157.97	352,377.61	154,026.64	.....	.....	3,193.57	1,638,069.36	169,229.26
Kentucky	660,119.87	24,122.59	1,357.03	13,745.00	19,015.16	14,576.59	36,814.98	125,015.83	96,205.26	.....	.....	10,591.39	1,001,563.70	.....
Louisiana	1,175,597.73	55,759.39	3,783.95	12,120.22	27,911.49	6,853.81	120,754.72	297,583.23	175,559.45	437,603.55	.....	.....	2,313,527.54	.....
Maine	201,197.69	17,927.06	3,061.09	3,020.91	7,894.28	6,404.17	13,771.32	47,082.30	12,883.55	12,336.00	.....	.....	325,578.37	45,528.55
Maryland	441,234.21	14,759.73	1,293.37	2,534.79	6,430.51	4,726.62	38,011.73	130,711.57	50,074.15	15,742.51	.....	.....	705,519.19	114,363.54
Massachusetts	513,876.67	3,525.82	2,011.72	19,043.94	13,803.57	5,056.29	5,712.85	17,291.07	1,898.26	.....	.....	.....	582,220.19	30,813.55
Michigan	1,317,535.56	56,200.70	2,866.95	5,062.72	13,396.99	34,629.67	132,446.50	138,819.03	140,685.30	.....	.....	.....	1,841,643.42	105,976.35
Minnssota	1,674,087.49	34,218.97	9,651.60	15,656.29	41,357.75	9,553.51	178,004.00	385,652.35	127,069.52	19,681.09	.....	.....	2,494,932.57	.....
Mississippi	662,705.08	17,936.30	5,198.41	8,766.30	48,774.45	12,395.54	81,604.46	304,984.28	110,677.88	56,441.39	30,393.35	.....	1,339,877.44	301,403.77
Missouri	392,387.72	29,300.91	3,279.89	6,624.35	14,898.25	32,030.96	49,530.35	144,962.88	70,189.66	.....	12,043.21	.....	755,248.18	229,605.79
Montana	509,566.52	14,373.66	4,261.30	5,090.23	36,876.49	7,551.97	17,018.13	182,610.38	27,600.17	49,320.86	19,793.53	.....	874,063.24	197,121.24
Nsbraska	752,159.67	40,192.93	11,641.16	8,253.56	17,842.06	20,061.30	14,345.97	352,458.08	145,397.75	12,924.43	.....	1,449.97	1,376,726.88	126,347.44
Nevada	38,291.98	3,108.04	1,033.36	527.22	1,376.98	784.02	7,539.79	36,628.21	5,092.08	1,810.13	5,474.46	305.56	101,971.83	4,048.11
New Hampshire	119,301.61	6,527.46	459.47	1,353.16	120.00	339.77	568.87	29,552.61	17,032.31	.....	.....	.....	175,255.26	.....
New Jsrssy	1,069,268.67	39,250.55	2,405.13	21,785.29	48,700.02	13,226.16	120,890.91	155,109.92	75,701.55	10,500.00	.....	.....	1,556,838.20	5,948.95
New Mexico	240,615.16	8,287.31	455.80	1,393.02	8,789.81	3,888.73	15,204.52	38,256.11	26,414.39	2,205.31	10,653.32	.....	356,163.48	.....
New York:														
Cornell	2,352,616.63	40,079.02	4,965.15	27,362.09	194,278.14	12,019.86	178,829.20	351,120.80	94,434.06	18,529.53	.....	.....	3,274,234.48	346,373.20
State	884,522.18	15,598.46	1,523.09	5,484.27	17,671.90	14,948.48	8,531.81	78,637.49	26,837.18	18,416.70	.....	.....	1,072,171.56	25,655.65
North Carolina	1,214,001.64	36,649.88	3,077.64	19,091.45	19,330.60	23,644.96	85,155.62	181,662.68	111,355.91	27,156.53	.....	.....	1,721,126.91	.....
North Dakota	401,412.01	24,024.81	26,234.07	4,576.53	54,345.17	19,204.05	80,533.34	196,054.07	78,320.61	194,215.85	13,437.08	.....	1,092,357.59	239,709.75
Ohio	1,107,048.04	27,687.57	9,071.71	12,159.39	29,647.08	6,924.57	28,686.16	364,715.44	41,720.60	476,788.11	.....	.....	2,104,448.67	369,844.50
Oklahoma	839,840.37	35,578.75	3,431.74	7,679.26	28,309.17	11,515.71	38,126.82	370,634.20	94,408.65	74,221.15	13,161.42	.....	1,516,907.24	223,951.25
Orsgon	1,277,749.65	64,281.06	7,448.92	12,142.60	19,598.40	19,872.49	45,862.40	299,085.52	91,060.89	86,535.62	65,405.35	7,648.55	1,996,691.45	.....
Psnnsylvania	1,012,694.64	47,198.21	1,664.44	2,973.56	8,625.52	14,120.30	5,570.28	173,998.15	45,605.67	244,919.26	.....	.....	1,557,370.03	114,040.59
Puerto Rico	732,555.69	15,751.15	3,198.86	8,025.63	30,924.95	30,531.10	19,715.59	151,839.23	83,757.99	177,481.61	35,290.37	24,923.68	1,313,995.85	96,304.02
Rhods Island	120,696.81	1,732.80	128.26	752.82	1,117.68	1,538.90	6,985.01	16,558.56	1,430.90	.....	.....	.....	150,941.74	62,395.97
South Carolina	509,938.89	13,348.05	3,310.95	3,756.19	14,558.20	3,883.37	34,799.15	121,807.05	29,782.66	836.20	.....	.....	736,020.71	56,525.78
South Dakota	279,358.18	13,114.56	4,573.09	2,583.32	5,674.26	9,108.93	8,235.54	82,267.26	59,760.28	.....	.....	.....	464,675.42	96,589.34
Tennessss	429,017.89	27,540.47	4,004.93	8,555.35	13,862.14	2,171.00	19,186.32	174,175.00	50,858.31	80,277.16	.....	.....	809,648.57	.....
Texas	1,712,682.52	58,434.57	3,950.79	28,664.59	75,571.46	4,074.46	300,584.92	416,490.96	246,818.53	84,657.04	22,130.30	81,138.95	3,035,199.09	854,444.86
Utah	362,614.88	23,508.35	3,008.53	8,303.43	13,968.86	10,196.43	24,610.66	107,168.79	43,722.33	31,669.92	21,970.78	.....	650,742.96	106,876.70
Vermont	82,953.82	3,082.29	57.95	1,837.87	7,065.13	2,392.33	15,428.19	6,140.05	9,044.35	7,353.55	.....	8,539.00	143,894.53	18,256.46
Virginia	742,099.18	35,091.11	4,408.58	12,215.47	35,637.21	3,275.88	58,283.17	180,392.52	88,486.73	11,333.04	.....	.....	1,171,222.89	115,166.14
Washington	1,436,436.31	60,579.99	13,274.15	12,838.93	25,569.06	19,584.81	70,178.92	402,576.73	114,080.73	8,357.67	63,141.45	.....	2,226,618.75	.....
West Virginia	208,982.53	3,585.46	653.96	3,270.20	15,493.81	944.71	24,908.84	112,193.13	25,028.86	27,965.00	.....	.....	423,026.50	160,892.16
Wisconsin	2,079,102.00	30,768.00	2,855.00	2,612.00	10,925.00	11,940.00	56,720.00	420,768.00	84,950.00	.....	.....	.....	2,700,640.00	.....
Wyoming	258,219.94	27,123.25	3,272.80	3,272.71	12,105.86	4,175.70	11,060.52	96,367.99	24,272.59	.....	.....	.....	439,871.36	28,790.55
Total	45,409,266.33	1,743,274.22	198,058.14	555,399.34	1,365,397.18	686,717.68	2,919,888.16	11,436,798.07	4,164,223.10	3,045,675.07	422,372.21	210,435.17	72,157,504.67	7,331,632.49

TABLE 12.--Summary by States of expenditures of the experiment stations for the year ended June 30, 1955

Station	Federal-grant funds							Contractual Federal funds, Agricultural Marketing Act Sec. 204(b)	Non-Federal funds	Grand total
	Hatch	Adams	Purnell	Bankhead-Jones, title I			Total			
				Sec. 5	Secs. 9(b)1 & 9(b)2	Sec. 9(b)3				
Alabama	$15,000.00	$15,000.00	$60,000.00	$88,305.89	$255,186.33	$60,800.00	$494,292.22	$4,257.87	$1,470,027.59	$1,968,577.68
Alaska	15,000.00	15,000.00	60,000.00	4,736.40	50,364.65	5,000.00	150,101.05	4,200.00	194,554.27	348,855.32
Arizona	15,000.00	15,000.00	60,000.00	16,740.68	72,577.17	50,680.91	229,998.76	2,817.22	550,895.68	783,711.66
Arkansas	15,000.00	15,000.00	60,000.00	66,187.20	211,783.02	46,235.00	414,205.22	.....	701,325.46	1,115,530.68
California	15,000.00	15,000.00	60,000.00	102,716.44	230,087.89	68,450.00	491,254.33	10,300.00	7,125,083.01	7,626,637.34
Colorado	15,000.00	15,000.00	60,000.00	25,460,16	95,920.53	79,600.00	290,980.69	4,996.34	981,366.77	1,277,343.80
Connecticut:										
State	7,473.31	7,500.00	29,981.03	11,210.66	38,630.44	3,000.00	97,795.44	.....	491,658.22	589,453.66
Storrs	7,500.00	7,500.00	28,826.82	11,257.19	38,280.86	46,028.20	139,393.07	11,775.81	569,790.80	720,959.68
Delaware	15,000.00	15,000.00	59,999.90	5,970.02	55,564.48	11,400.00	162,934.40	.....	371,985.84	534,920.24
Florida	15,000.00	15,000.00	60,000.00	47,873.37	113,138.98	24,085.18	275,097.53	11,050.05	3,420,626.91	3,706,774.49
Georgia	15,000.00	15,000.00	60,000.00	98,402.95	264,092.75	97,886.00	550,381.70	20,672.71	1,973,041.74	2,544,096.15
Hawaii	15,000.00	15,000.00	60,000.00	10,463.17	65,183.35	10,306.69	175,953.21	.....	568,532.97	744,486.18
Idaho	15,000.00	15,000.00	60,000.00	16,866.19	83,147.20	50,000.00	240,013.39	4,152.77	608,024.52	852,190.68
Illinois	15,000.00	15,000.00	60,000.00	99,426.70	242,843.77	69,030.33	501,300.80	4,842.26	2,194,829.06	2,700,972.12
Indiana	15,000.00	15,000.00	59,982.90	78,845.15	210,932.42	111,506.79	491,267.26	25,894.91	2,427,588.82	2,944,750.99
Iowa	15,000.00	15,000.00	60,000.00	74,227.20	214,934.48	114,933.66	494,095.34	42,747.43	2,467,167.86	3,004,010.63
Kansas	14,999.76	15,000.00	60,000.00	53,057.23	148,309.14	56,306.94	347,673.07	12,399.97	1,638,069.36	1,998,142.40
Kentucky	15,000.00	15,000.00	60,000.00	93,378.88	264,036.42	57,101.72	504,517.02	9,893.96	1,001,563.70	1,515,974.68
Louisiana	15,000.00	15,000.00	60,000.00	60,813.78	179,737.59	39,135.00	369,686.37	.....	2,313,527.54	2,683,213.91
Maine	15,000.00	15,000.00	60,000.00	22,270.68	84,908.54	44,170.00	241,349.22	17,500.00	325,578.37	584,427.59
Maryland	14,530.77	15,000.00	60,000.00	36,488.62	106,679.77	36,873.90	269,573.06	15,053.05	705,519.19	990,145.30
Massachusetts	15,000.00	15,000.00	60,000.00	36,698.19	95,538.52	50,133.26	272,369.97	2,932.00	582,220.19	857,522.16
Michigan	15,000.00	15,000.00	60,000.00	93,777.64	231,003.12	50,379.37	465,160.13	61,177.78	1,841,643.42	2,367,981.33
Minnesota	15,000.00	15,000.00	60,000.00	68,128.03	208,801.71	47,000.00	413,929.74	.....	2,494,932.57	2,908,862.31
Mississippi	15,000.00	15,000.00	60,000.00	80,016.75	263,544.53	67,226.00	500,787.28	26,768.21	1,339,877.44	1,867,432.93
Missouri	15,000.00	15,000.00	60,000.00	78,849.57	232,680.25	44,450.00	445,979.82	13,000.00	755,248.18	1,214,228.00
Montana	14,993.31	15,000.00	59,996.65	18,004.00	79,549.95	54,733.98	242,277.89	.....	874,063.24	1,116,341.13
Nebraska	15,000.00	15,000.00	60,000.00	41,343.56	130,704.24	46,950.00	308,997.80	2,730.53	1,376,726.88	1,688,455.21
Nevada	15,000.00	15,000.00	60,000.00	3,435.49	50,440.02	26,800.00	170,675.51	.....	101,971.83	272,647.34
New Hampshire	15,000.00	15,000.00	60,000.00	11,363.43	63,676.97	29,720.00	194,760.40	.....	175,255.26	370,015.66
New Jersey	15,000.00	15,000.00	60,000.00	32,575.43	94,560.83	54,441.83	271,578.09	7,890.76	1,556,838.20	1,836,307.05
New Mexico	15,000.00	15,000.00	60,000.00	17,027.28	79,600.02	46,450.00	233,077.30	.....	356,163.48	589,240.78
New York:										
Cornell	13,496.82	13,492.91	53,920.32	97,003.91	209,030.22	103,467.67	490,411.85	9,570.29	3,274,234.48	3,774,216.62
State	1,499.56	1,500.00	5,989.89	10,778.21	23,209.77	19,967.79	62,945.22	.....	1,072,171.56	1,135,116.78
North Carolina	15,000.00	15,000.00	60,000.00	135,186.64	357,881.86	79,340.00	662,408.50	.....	1,721,126.91	2,383,535.41
North Dakota	15,000.00	15,000.00	60,000.00	26,670.28	100,550.54	16,150.00	233,370.82	.....	1,092,357.59	1,325,728.41
Ohio	15,000.00	15,000.00	60,000.00	118,853.05	278,117.96	75,750.00	562,721.01	11,013.01	2,104,448.67	2,678,182.69
Oklahoma	15,000.00	15,000.00	60,000.00	63,847.68	171,437.82	41,900.00	367,185.50	15,734.05	1,516,907.24	1,899,826.79
Oregon	15,000.00	15,000.00	60,000.00	35,230.21	110,927.06	80,305.09	316,462.36	14,711.50	1,996,691.45	2,327,865.31
Pennsylvania	15,000.00	15,000.00	60,000.00	155,317.78	298,239.36	73,646.53	617,203.67	1,910.64	1,557,370.03	2,176,484.34
Puerto Rico	15,000.00	14,885.41	59,462.07	65,217.56	243,302.26	37,954.18	435,821.48	.....	1,313,995.85	1,749,817.33
Rhode Island	15,000.00	15,000.00	60,000.00	6,257.12	53,250.76	32,820.00	182,327.88	5,362.04	150,941.74	338,631.66
South Carolina	15,000.00	15,000.00	60,000.00	68,111.24	202,696.17	44,367.00	405,174.41	.....	736,020.71	1,141,195.12
South Dakota	15,000.00	15,000.00	60,000.00	26,510.78	99,453.39	39,300.00	255,264.17	6,664.67	464,675.42	726,604.26
Tennessee	15,000.00	15,000.00	60,000.00	92,293.90	268,210.82	58,937.00	509,441.72	8,348.89	809,648.57	1,327,439.18
Texas	15,000.00	15,000.00	60,000.00	150,461.58	358,073.99	83,800.00	682,335.57	16,675.00	3,035,199.09	3,734,209.66
Utah	15,000.00	15,000.00	60,000.00	12,499.09	68,925.56	70,850.00	242,274.65	4,253.49	650,742.96	897,271.10
Vermont	15,000.00	14,970.03	58,607.97	12,867.78	67,153.96	19,390.66	187,990.40	1,386.41	143,894.53	333,271.34
Virginia	15,000.00	15,000.00	60,000.00	88,612.55	229,018.54	61,700.00	469,331.09	3,569.00	1,171,222.89	1,644,122.98
Washington	14,938.78	15,000.00	58,288.22	43,950.86	126,022.55	96,848.50	355,048.91	16,147.99	2,226,618.75	2,597,815.65
West Virginia	14,999.92	15,000.00	59,996.27	65,794.28	165,720.09	48,812.51	370,323.07	2,500.00	423,026.50	795,849.57
Wisconsin	15,000.00	15,000.00	60,000.00	73,259.15	211,983.49	91,212.46	466,455.10	6,578.01	2,700,640.00	3,173,673.11
Wyoming	15,000.00	15,000.00	60,000.00	7,662.93	59,873.77	41,800.00	199,336.70	12,444.70	439,871.36	651,652.76
Total	764,432.23	764,848.35	3,055,052.04	2,862,304.51	8,259,519.88	2,819,134.15	18,525,291.16	453,923.32	72,157,504.67	91,136,719.15

TABLE 13.--Summary by classification of expanditurea of the experimant stations for tha yaar andad Juna 30, 1955

Account	Hatch Act	Adams Act	Purnall Act	Bankhaad-Jones Act, titla I			Total	Contractual Faderal funda, Agricultural, Markating Act, Sac. 204(b)	Non-Faderal funds	Grand total
				Sec. 5	Saca. 9(b)1 and 9(b)2	Sac. 9(b)3				
01 Parsonal sarvicas	$610,580.08	$679,427.18	$2,628,566.33	$2,419,941.70	$5,978,477.95	$1,818,097.71	$14,135,090.95	$316,893.24	$45,409,266.33	$59,861,250.52
02 Traval	26,389.85	5,559.20	54,296.32	43,684.20	224,117.49	192,450.04	546,497.10	31,572.12	1,743,274.22	2,321,343.44
03 Transportation of thinga	427.10	414.12	1,803.68	1,905.66	10,830.78	4,997.37	20,378.71	877.51	198,058.14	219,314.36
04 Communication sarvica	6,864.02	530.96	3,072.56	2,002.49	13,159.09	6,540.36	32,169.48	2,090.60	555,399.34	589,659.42
05 Rants and utility sarvicas	2,040.02	2,141.70	8,058.28	4,909.18	33,268.85	15,128.81	65,546.84	3,598.82	1,365,397.18	1,434,542.84
06 Printing and raproduction	38,061.34	.....	22,031.17	9,993.33	31,443.99	20,954.05	122,483.88	4,800.17	686,717.68	814,001.73
07 Other contractual sarvicas	6,363.27	6,253.02	34,227.86	40,148.67	156,204.27	84,767.39	327,964.48	25,417.02	2,919,888.16	3,273,269.66
08 Supplies and matarials	46,330.63	45,728.23	172,600.77	223,769.01	879,297.35	366,172.00	1,733,897.99	34,142.78	11,436,798.07	13,204,838.84
09 Equipment	23,870.03	21,408.86	110,855.32	96,099.76	817,211.77	256,051.17	1,325,496.91	34,283.27	4,164,223.10	5,524,003.28
10 Landa and structuras (contractual)	499.35	317.62	8,303.69	10,844.08	99,676.07	50,259.39	169,900.20	.....	3,045,675.07	3,215,575.27
11 Contributions to ratirement	2,457.51	2,492.05	9,042.00	6,959.49	10,798.82	2,261.10	34,010.97	.....	422,372.21	456,383.18
15 Taxes and asaassmenta	549.03	575.41	2,194.06	2,046.94	5,033.45	1,454.76	11,853.65	247.79	210,435.17	222,536.61
Total	764,432.23	764,848.35	3,055,052.04	2,862,304.51	8,259,519.88	2,819,134.15	18,525,291.16	453,923.32	72,157,504.67	91,136,719.15

TABLE 14.--Expandituraa and allotments undar tha Agricultural Markating Act, Saction 204(b), for tha yaar endad June 30, 1955

Station	Expendituras												Unax-panded	Funds availabla[1]
	Personal sarvicas	Travel	Trans-portation of things	Communi-cation sarvica	Rants and utility services	Printing and repro-duction	Other contractual sarvicaa	Supplies and matariala	Equipment	Lands and atructures (contractual)	Taxas and assess-menta	Total expendi-turas		
Alabama	$3,366.50	$516.37	.....	.....	$50.00	.....	$100.60	$224.40	.....	.....	.....	$4,257.87	$1,842.13	$6,100.00
Alaska	4,200.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,200.00	.....	4,200.00
Arizona	124.50	736.95	.....	$51.17	.....	$100.00	1,505.66	296.45	.....	.....	$2.49	2,817.22	1,182.78	4,000.00
California	6,969.48	567.27	.....	.....	.....	.....	937.81	1,044.92	$780.52	.....	.....	10,300.00	.....	10,300.00
Colorado	4,186.94	45.81	.....	.....	6.00	.....	490.37	253.92	13.30	.....	.....	4,996.34	3.66	5,000.00
Connecticut (Storrs)	8,200.00	985.09	.....	67.20	600.00	.....	900.00	100.76	922.76	.....	.....	11,775.81	354.75	12,130.56
Florida	11,050.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,050.05	3,274.95	14,325.00
Georgia	16,986.85	1,255.95	$7.08	.....	.....	457.35	194.98	1,433.71	336.79	.....	.....	20,672.71	.....	20,672.71
Idaho	3,470.00	358.47	.....	.....	39.45	.....	.....	284.85	.....	.....	.....	4,152.77	847.23	5,000.00
Illinois	4,324.85	188.80	1.35	.50	.....	.....	.....	265.97	60.79	.....	.....	4,842.26	7,946.84	12,789.10
Indiana	20,064.06	2,589.14	18.12	7.47	.....	.....	290.57	1,903.86	1,021.69	.....	.....	25,894.91	3,325.46	29,220.37
Iowa	23,733.33	1,848.15	37.03	92.23	.....	18.47	.....	8,130.14	8,888.08	.....	.....	42,747.43	4,186.18	46,933.61
Kansas	11,919.72	79.76	.....	.....	.....	.....	8.36	57.60	192.50	.....	142.03	12,399.97	.03	12,400.00
Kentucky	8,530.02	780.65	.....	3.35	.....	.....	215.00	.....	264.31	.....	100.63	9,893.96	6,606.04	16,500.00
Maine	9,288.40	2,857.53	34.33	531.27	734.91	.....	1,015.23	1,295.80	1,742.53	.....	.....	17,500.00	.....	17,500.00
Maryland	10,815.63	3,463.12	.....	.....	.....	405.68	.....	10.12	358.50	.....	.....	15,053.05	1,455.41	16,508.46
Massachusatts	2,657.27	158.90	.....	38.54	.....	.....	.....	77.29	.....	.....	.....	2,932.00	2,157.81	5,089.81
Michigan	42,717.16	1,908.79	16.30	86.28	.....	757.37	10,344.23	1,458.49	3,889.16	.....	.....	61,177.78	8,119.24	69,297.02
Missisaippi	18,281.90	838.32	553.87	362.14	1,560.00	362.00	1,406.81	2,350.30	1,052.87	.....	.....	26,768.21	231.79	27,000.00
Missouri	10,587.71	479.63	.75	62.73	.....	.....	1,047.64	450.79	370.75	.....	.....	13,000.00	.....	13,000.00
Nabraska	2,645.00	85.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,730.53	2,269.47	5,000.00
New Jersey	5,212.50	23.25	.....	.....	.....	.....	.....	820.10	1,834.91	.....	.....	7,890.76	1,417.24	9,308.00
New York (Cornall)	2,439.36	1,861.10	.....	.....	.....	67.00	1,194.19	3,311.73	696.91	.....	.....	9,570.29	1,406.52	10,976.81
Ohio	7,976.73	1,327.64	.....	220.57	110.73	.....	1,367.32	10.02	.....	.....	.....	11,013.01	.....	11,013.01
Oklahoma	15,691.28	42.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,734.05	265.95	16,000.00
Oregon	12,925.80	537.61	.....	.....	.....	.....	396.04	641.10	210.95	.....	.....	14,711.50	2,288.50	17,000.00
Pennsylvania	367.00	1,292.54	.....	1.10	.....	.....	.....	250.00	.....	.....	.....	1,910.64	1,883.96	3,794.60
Rhode Island	4,638.24	85.78	.....	.....	.....	.....	589.07	48.95	.....	.....	.....	5,362.04	101.45	5,463.49
South Dakota	3,991.64	161.25	.....	3.40	200.00	6.06	123.77	102.86	2,075.69	.....	.....	6,664.67	835.33	7,500.00
Tennassee	4,537.15	7.94	.....	.....	.....	.....	10.00	2,818.80	975.00	.....	.....	8,348.89	223.07	8,571.96
Taxas	9,674.65	840.71	3.46	400.07	259.43	726.54	104.50	2,637.06	2,028.58	.....	.....	16,675.00	.....	16,675.00
Utah	560.28	4.45	33.06	.....	20.30	.....	152.46	862.06	2,620.88	.....	.....	4,253.49	746.51	5,000.00
Varmont	1,362.90	7.38	.....	.....	.....	.....	.....	13.49	.....	.....	2.64	1,386.41	522.81	1,909.22
Virginia	2,629.00	465.02	.....	.....	.....	.....	474.98	.....	.....	.....	.....	3,569.00	1,035.65	4,604.65
Washington	9,968.98	3,071.32	40.75	53.78	18.00	58.40	145.98	1,439.28	1,351.50	.....	.....	16,147.99	10,274.72	26,422.71
West Virginia	1,466.67	970.76	.....	.....	.....	.....	.....	62.57	.....	.....	.....	2,500.00	.....	2,500.00
Wisconsin	2,556.50	50.00	26.67	.....	.....	1,411.70	1,565.97	776.24	190.93	.....	.....	6,578.01	921.99	7,500.00
Wyoming	6,775.19	1,078.37	104.74	108.80	.....	429.60	835.48	709.15	2,403.37	.....	.....	12,444.70	55.30	12,500.00
Total	316,893.24	31,572.12	877.51	2,090.60	3,598.82	4,800.17	25,417.02	34,142.78	34,283.27	.....	247.79	453,923.32	65,782.77	519,706.09

[1] Included are allotments from the appropriation for fiscal year 1955 plus unexpended balances of allotments from appropriation for fiscal year 1954.

☆U. S. GOVERNMENT PRINTING OFFICE : 1956 O - 375909